DOCUMENT RESUME

ED 029 083 08 VT 006 288

By-Stauber, Richard L.

State and Local Governments as Employers of Youth Trained in Vocational-Technical Schools. Final Report.

Wisconsin Univ., Madison.

Bureau No-BR-5-0174

Pub Date Jun 68

Contract-OEC-6-85-054

Note-146p.

EDRS Price MF-$0.75 HC-$7.40

Descriptors-*City Government, Educational Needs, *Employment Opportunities, Employment Practices, Government Employees, *Graduates, Individual Characteristics, Occupational Information, Questionnaires, *State Government, *Vocational Education, Youth Employment

Identifiers-Wisconsin

This project was the research phase of a 3-part program designed to define the potential demand by state and local governments for youth trained by vocational-technical schools. Eleven county areas were selected in Wisconsin which contained a vocational school and a substantial number and variety of government personnel. Budgets, personnel rosters, job specifications, vocational school course offerings, and other documents were collected and reviewed, and interviews with government officials and school personnel were conducted. Over 6,500 employee questionnaire s were completed and processed. Some conclusions were: (1) The size of the sub-professional labor force of government was substantial, (2) Many preconditions of employment had been established by government, (3) A high proportion of vacant positions were filled by persons already employed by government, (4) The number of menial jobs for which vocationally trained youth would be over-qualified, comprised a substantially large portion of the positions, (5) Government did not compete with private industry in recruiting practices or monetary rewards, and (6) Very little was known about government jobs, either by the schools, the students, or the government employers themselves. (DM)

BR-5-017
OE-BR

ED029083

FINAL REPORT
Project No. 284 (5-0174)
Contract No. OE-6-85-054

STATE AND LOCAL GOVERNMENTS AS EMPLOYERS OF YOUTHS TRAINED IN VOCATIONAL-TECHNICAL SCHOOLS

June 1968

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

VT 006 288

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

STATE AND LOCAL GOVERNMENTS AS EMPLOYERS OF YOUTHS TRAINED IN VOCATIONAL-TECHNICAL SCHOOLS

Project No. 284 (5-0174)
Contract No. OE-6-85-054

Richard L. Stauber

June 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

The University of Wisconsin Extension

Madison, Wisconsin

Table of Contents

Introduction.............. 1

Method.................... 5

Results...................13

Discussion................58

Conclusions...............78

Summary...................82

Introduction

This report is concerned with the general problem of governments as employers of persons trained in vocational/technical schools. It summarizes the research phase of a projected three-part program to provide a benchmark for vocational school-state, local government relations nationwide.

One aspect of the problem which prompted this study has been phrased by the Municipal Manpower Commission in its report, Governmental Manpower for Tomorrow's Cities: "The American society is clearly not supplying, and offers no promise of supplying in this decade, an adequate number of able young people trained for the specific tasks of local government." There has been increasing concern about this shortage, but much more attention has been given over the years to attracting the college graduate to public employment than to almost any other aspect of recruitment. Relatively little concern has been directed toward the problem of recruiting qualified people for government jobs that do not require college degrees or standard professional licensing.

These "sub-professional" positions--draftsmen, engineering aids, equipment operators, repairmen, practical nurses, bakers, cooks, and keypunch operators, to name a few--comprise a large proportion of total government employment. For example, Wisconsin state government in January 1962 employed a total of 639 engineers while at the same time employing 1,069 technicians, according to the Bureau of Labor Statistic's bulletin, Employment of Scientific and Technical Personnel in State Government in 1962. Although it has considerable internal differentiation, government as a class is a very large employer in all states and a potential recipient of placements from vocational/technical schools. Furthermore, the manpower demands of government have consistently increased over the last two decades, with state and local governments accounting for most of the growth in public employment.

Another aspect of the problem is that for many young people, government is a vague, mysterious thing. It is very likely that vocationally-trained young persons seeking employment, and the counsellors with whom they consult to find jobs, do not realize the extent of government employment, or that state and local governments employ three-fourths of the more than eleven million civilian public employees. Preliminary inquiries lead to the belief that there is widespread ignorance of government as an employer on the part of the schools, since no basic empirical study of the pre-service training needs of sub-professional government employees has been undertaken to give the true picture. In the absence of basic, comprehensive data, the lack of information must extend to youths.

It is also possible that the information available is erroneous and biased. Government employment is gradually losing the rather clear-cut stigma that became attached to it decades ago in the era of the spoils system. In large areas of our society, however, rather evident "blinders" exist that keep proper attention from being placed upon governmental employment, both from the standpoint of youth and of society's need to recruit qualified personnel into essential services performed through government. To illustrate, the Municipal Manpower Commission found that: "Local officials voiced strong complaints about public attitudes. They charged that educators in high schools, colleges and professional schools--in their teaching of government and in their vocational guidance--actively discourage able students from entering local government service. Furthermore, all students gain a biased view from stereotyped textbook discussions which convey an obsolete picture of the tasks, the nature of the organization and personnel of local governments."

Young people have a problem in making employment choices unless facts are clearly known and stated, and guidance personnel will have great difficulty in aiding them to make wise employment choices after considering governmental employment. These difficulties could exist because of a lack of effort on the part of many governments in telling their employment story. For their part the governments and government agencies probably have a real problem in obtaining qualified personnel in today's competitive employment market--competitive at least for well-trained people. Problems of prestige, low visibility, pay, and non-functional personnel practices frequently have been charged against government, and if these problems exist, they are intertwined, and must compound the difficulty of recruitment.

The problem of pre-service training may not even be recognized by state and local--but especially local--governments, and untrained persons possibly are being hired into jobs for which vocational or technical education would be most desirable. The need and desirability for pre-service vocational/technical training may either not be recognized or else permanent shortages of trained personnel may have habituated these governments to employing undertrained people.

From the standpoint of vocational/technical schools, the historical emphasis has been upon training persons for employment in private business, industry and agriculture. The size and internal characteristics of the governmental labor force may be unknown or known only vaguely, since state and local government as employers have truly been terra incognita except where college placements have been involved. A descriptive and analytical study of the pre-service training needs of sub-professional state and local government personnel, to what extent these needs are being filled, and through what procedures, is needed to provide a reasonable basis for the improvement of school-government articulation.

The results of such a study are the subject of this report. In undertaking the study we began with the following assumptions:

(1) Current relationships between vocational school educators, vocationally-trained youth, and government employers tend to be unsystematic, sporadic, and conducted on the basis of mutually inaccurate perceptions.

(2) Improvements in those relationships are essential to assure proper curriculum planning, guidance, placement, and an adequate supply of trained manpower to meet current and future demands of state and local governments for sub-professional personnel.

(3) An ideal set of relationships can be achieved through the establishment of pilot programs involving local vocational school people and government employers located in the area served by the school.

(4) Such programs are possible only if the dimensions of the problem are more clearly defined through a study of the current status of state and local governments as potential employers of youth after vocational/technical education, and of vocational/technical schools as sources of recruits for state and local government service.

(5) Wisconsin, with one of the more highly developed systems of vocational, technical, and adult education among the 50 states, with a state and local government work force whose size closely approximates the 50-state average, and with strong city and county governments that perform a wide variety of services demanding a great diversity of employment skills, is an appropriate state in which to conduct such a study.

(6) By consciously restricting our efforts to those cities in Wisconsin with vocational schools located in areas having what might be termed an extensive state-local government labor market, a considerable variety of practice and experience could be uncovered.

(7) Other areas having smaller governmental labor forces could draw lessons from our findings by reducing data, conclusions, and recommendations to their scale, and while generalizing to larger labor forces or to other states might be somewhat more difficult, this also seemed possible, or at least implications of nationwide significance could be suggested.

Interpreting the Manpower Commission's statements for study purposes therefore seemed to us to pose two questions: (a) What is the present and potential nature of the governmental job market for young people trained in vocational/technical schools? (b) How can the vocational/technical schools of the country further improve their functioning as suppliers of trained personnel to state and local governments and thereby contribute even more to the general improvement of the quality of government of the nation as a whole?

The answers to these questions are important to the vocational schools in Wisconsin and other states as they develop curriculum and provide occupational guidance. They are important to state and local governments all over the country as they seek to meet rising levels of demand for services through higher quality personnel.

In order to provide answers to these questions, we concluded that a three-part program aimed at establishing an ideal set of vocational school relationships with state and local governments was necessary. This report summarizes the results of the first--research--phase of the projected program. In our opinion the first step toward improved relationships was to identify the extent and characteristics of state and local government employment as these were relevant to current and prospective programs of vocational/technical schools--this was the primary objective of the study described in this report.

Once the parameters of the problem were identified through this study, the research results subsequently would be the subject of joint review by school people and government officials in a series of conferences to reach agreement upon their implications. The conferences would produce a design for an "ideal" program that could be translated into a pilot program in several Wisconsin communities.

Finally, vocational/technical schools and the governments within their service areas would implement the program, cooperating under carefully established guidelines growing out of the conferences, to produce the most mutually satisfactory educational arrangements.

Our immediate objective, therefore, in conducting the study with which this report is concerned, was to explore, identify, and illuminate the areas of current or potential working relationships between governments and vocational schools, while our ultimate objective is to produce a pilot program that will serve as a model for increasingly effective relationships between vocational schools and state and local governmental personnel systems.

Method

We had defined the immediate problem that made this study necessary as a problem in school-employer relationships--a communications problem--the root of which we believed to be either the absence, inaccuracy, disuse or misuse of basic information about the state and local government labor force. This section of the report describes the proposed plan of research designed to investigate that problem, and the underlying premises of the research design.

The plan of research was experimental and exploratory, designed as much to evoke hypotheses as to test them, and also to yield basic employment and educational data that would be useful to government employers and vocational schools. It included the following procedures:

(1) Select geographical areas, schools, governments and employees to be studied.

(2) Identify appropriate authorities, explain purposes of study to them, and obtain their cooperation and permission to conduct the study.

(3) Collect job specifications from governments and determine from them the duties and responsibilities of each class of positions and the qualifications required of recruits to be considered eligible for employment.

(4) Examine government personnel records to determine the number of positions in each class of jobs, changes over time in the number of positions, and frequency that positions need to be filled.

(5) Prepare, evaluate, distribute, collect and analyze an employee questionnaire designed to elicit personal, educational, and job information from all employees currently filling each class of selected positions.

(6) Collect vocational school course and program descriptions and offerings and compare them with the requirements specified for each class of positions.

(7) Examine records and interview state and local vocational school and government officials to obtain a description of, and evaluate, the organization and procedures utilized to plan for, train, and recruit personnel for government positions.

In formulating our research design we were guided by a number of premises about government employment, vocational education, and school-employer relationships. Our major hypothesis was, of course, that an information problem existed: that government employers were not properly informed of the function the local vocational school could perform as a source of trained manpower and--a more serious problem--that the local vocational school and its students were not properly informed of the manpower requirements of the governments operating in their vicinity. Our major premise implied that the local vocational school could, in fact, serve as a source of trained recruits for governments in its vicinity and, obversely, that governments operating in the vincinity of vocational schools did, in fact, have some need for recruits with vocational school training. An additional premise was that the consequences of inadequate or incorrect information were detrimental: governments were not obtaining an adequate supply of trained personnel.

Our research was designed both to examine the validity of these premises and, on the assumption they were valid, to provide factual and explanatory information to serve as a basis for improving school-employer relationships. Since we perceived the problem as one of insufficient and inaccurate information, our research goal was both to collect the needed information and to investigate the dimensions of the information problem itself. An inventory of government positions and vocational training opportunities--although necessary--would not automatically improve communications and alleviate the manpower problem unless the conditions that created the problem were understood and corrected. In other words, the research procedures were designed not only to close the information gap by collecting the missing data, but also to determine whether, and why, the information gap existed, and what its consequences were for government employment.

In addition to the premises contained in our conception of the problem, another set of assumptions about the data to be collected, where it was to be collected, how it could be collected, and what it would yield, were built into the research design. The most important of these were derived primarily from our conception of government employment.

For example, the selection of specific geographical areas in which to conduct the study was determined through criteria developed in the research design. According to this criteria, the areas selected had to contain, in addition to a public, municipal vocational school, an extensive state-local government labor market, by which we meant a substantial number and variety of government positions. We assumed that at a minimum, state, county, and city positions had to be included in each area selected in order to obtain reasonably complete coverage of all types of state-local government positions. We reasoned that the number and types of positions employed by cities, counties, and the state would differ because different functions of government (highways, mental health, corrections, water supply, sewage disposal, and so forth) would require different occupations (draftsmen, nurses aides, guards, meter readers, pump operators, etc.) and the performance of these functions might be shared by different levels of government, assigned to one level rather than another, or different responsibilities for the same function might be assigned to different levels of government (highway planning and engineering, for example, might be assigned to the state, and highway maintenance assigned to the county). Because of these differences, meaningful coverage of the government labor market required selection of areas where personnel were employed by all three levels of government, especially if the study were to have any utility to states other than Wisconsin, where the organization and activities of state and local governments differs from the Wisconsin situation.

We also assumed it advisable to conduct the study in several Wisconsin areas, for comparative purposes, to increase the probability that all types of jobs would be included, and again, because of the belief that our findings could be useful not only to the areas where the study was conducted, but to other areas in Wisconsin and other states; by studying conditions in a number of areas we assumed that a considerable variety of practice and experience would be uncovered, as well as governmental labor forces of varying sizes. This would increase the possibility of generalization to other Wisconsin areas, and other states.

We viewed the "bundle" of services provided by state and local governments as being quite similar among the states: all of the same governmental functions will be provided, but will be divided up in various ways among the jurisdictions encompassed within individual state borders. Wisconsin counties, for example, are unusual in the extent of highway activities in which they engage and may be contrasted with the much smaller Kentucky counties which are far less involved in highway work. Because of federal aids and other factors, however, the relative level of total highway activity among the states is fairly comparable: the number of personnel employed to carry out the highway function of government, and the type of government by which they are employed, will differ from area to area, but the skills needed by highway employees will be the same. We believed that even though the total volume of expenditure and the per capita volume of expenditure varies between states, the jobs to be done by equipment operators, surveyors, draftsmen, diesel technicians, technical aides, and computer programmers are certain to be nearly identical because the technology of highway construction and repair demands particular kinds of functions to be performed. Opportunities for vocational schools to provide trained personnel should be fairly similar, because the positions require similar skills. We thought that conclusions that might be drawn about the types of jobs to be done by governmental highway forces and their significance for vocational schools should be fairly well applicable to other states, such as Kentucky, even though the maintenance may be done by county employees in Wisconsin and state crews in Kentucky.

With these considerations in mind, we concluded that a study of the skills and training needed by state and local government employees in areas of one state would be applicable to other states, but only if the areas studied contained a reasonably complete vertical (state, county, city) "slice" of the state-local government labor force. If our purpose had been to ascertain and eventually improve school-employer relationships only in the areas studied, then any city containing a vocational school could have been selected, regardless of whether a complement of state and county workers also was employed in the vicinity.

In selecting areas containing city, county, and state employees, then, our motive was to assure a reasonably complete inventory of all the various classes of positions, so the findings would have wide application. A mere description of the pre-service skills and training needs of various sub-professional classes of government positions was, however, a relatively minor research goal, ancillary to the basic research objective of developing a clear picture of the current status of governments as potential employers for youth after vocational education, and of vocational schools as sources of recruits to state and local government employment. We assumed that this picture would differ from one area to another; that the number and frequency of need for each class of positions, the manner in which the need was being met, the nature of the information problem, and so forth, would vary between places, and to obtain a reasonably accurate general picture of current and potential school-employer relationships, to increase the potential applicability of our finding to other areas, and also to enhance possibilities for the eventual establishment of pilot programs, a fairly large number of areas as well as classes of positions should be included in the study.

Given these assumptions, the criteria we developed for selecting specific study areas in Wisconsin was that the area contain a vocational school located in a city that was the seat of county government in a county containing at least one state installation employing 50 or more persons. We decided at the outset to exclude two atypical areas from consideration, Madison and Milwaukee. Madison, the state capital, has an unusual concentration of public employees, and Milwaukee is the only extremely large city in the state. This reduced to eleven the number of areas that met the criteria. For reasons already noted, we decided to include all of these areas in the study, excluding only those where permission to conduct the study was unobtainable from the proper authorities.

It should be noted that no special difficulty in identifying these authorities or their labor force was foreseen. Our plan was to investigate, in each area, positions and employees of county government, state government, and of the government of the city in which the vocational school was located; to determine the organization and procedures used by each of these governments for personnel administration; to explore the relationships between the area vocational school and city, county and state government employers. We tended, as the above statement indicates, to regard each government--the city, the county, and the state--as a separate, distinct, identifiable employing entity. We were to focus on 11 city governments, 11 county governments, and 1 state government, and we anticipated no great difficulty in identifying the positions, employees, and administrators of any particular government. This assumed, of course, that the governments themselves--that all of the various organizational components that comprised the entity of city government, of state government, and of county government--could be identified. At a minimum, we assumed that few if any questions would arise over whether a department, agency, or office (and its employees and officers) was or was not a part of the government. Because no real problem was foreseen, no criteria was developed beforehand to decide which persons and positions in each area's total labor force were to be considered employees of the city, county and state. We assumed that officials of the governments themselves could tell us who worked for the governments, or at the very least, that through an examination of the budgets, payrolls, organization charts, personnel lists and other documents of those governments, we could determine for ourselves the structure of each government and therefore the jobs, employees and personnel system to be studied.

Assuming that the labor force of all three types of government could be identifed, class specifications for all positions were to be collected from each government. These specifications would be studied to ascertain the educational and related experience requirements for each class of positions. This method would develop the total configuration of the personnel structure within which persons educated in vocational and technical schools might seek employment. We thought that these specifications would provide a rather clear idea of the educational expectations of the governments surveyed.

They would serve another basic function as well, by setting the position boundaries for the survey of incumbent employees. Elected officials, police and fire forces, and positions for which the baccalaureate or recognized professional training (such as registered nurses) was necessary for employment, were the only positions and persons to be excluded from the study, and the class specifications would indicate which jobs and employees to exclude. If, for example, a government hired only college graduates to fill its accounting positions, then the accountant position and all employees incumbent in that position would be excluded from consideration and study. It is obvious that we assumed that government employers used some standards for judging whether a person was qualified to perform the job for which he was being hired, and that these standards would be related to, and would therefore vary according to the type of work that had to be performed on the job.

Background data on all employees except police and fire personnel, elected officials, and positions requiring completion of college and professional training, would be collected by a questionnaire completed by each employee, and would provide a picture of actual recruiting practices, show the real extent of the job market for youth who might be interested in employment with state or local government, and provide data on the relationships between educational quantity and source. Trend data would be developed on the basis of the questionnaire and government and school records.

A sampling of the defined employee population was rejected. Because of the criteria used to select study areas, and the large number of areas, this population itself, it was believed, would represent an effective if not representative sample of the vocational school state-local government labor market in Wisconsin. Because of probable discontinuities in the employee population, such as classifications having only one, two or three persons in them and the variations in practice and nomenclature, a complete census of all positions except those excluded by definition, was deemed strongly advisable.

Because the number of employees involved would be quite large (our original estimate was that as many as 13,000 employees could be included) a personal interview with each employee was not practicable. Nor was an interviewer thought to be needed, since the questionnaire was designed to elicit basic factual information of the type found on job application forms and presumably well-known to the employee himself. Thus, the questionnaire was designed to be completed by the employee himself. The method used to distribute and collect the questionnaire would vary, depending upon arrangements worked out with officials of the employing jurisdictions. The data collected by the questionnaire would be coded and transformed for automatic machine processing.

Through an analysis of class specifications, employee questionnaire data, personal interviews with employers and vocational school officials, and school and government records, we hoped to identify the extent and characteristics of state and local government employment as these were relevant to current and prospective programs of vocational/technical schools, and eventually, to use this data as a basis for pilot programs in various areas of the state that would seek to establish an optimum set of school-employer relationships.

More specifically, our research procedures were designed to determine, for individual geographical areas:

(1) The state and local government positions that do not require a college and/or professional degree as a qualification for employment.

(2) The occupations--those positions represented, as defined by the duties and responsibilities involved, and the number of persons filling each class of positions.

(3) The pre-service training and other qualifications required by employers before a person is considered eligible for employment in each class of positions.

(4) The number of recruits needed, for each class of positions, and the frequency of need.

(5) The characteristics, and particularly the job-related educational and experience characteristics of persons currently employed in those positions.

(6) The personnel practices and procedures used by government employers to obtain persons for those positions.

(7) The extent to which the area vocational school is aware of government employment opportunities and serves as a source of recruits for those positions.

(8) The extent to which the area vocational school is providing training opportunities that would adequately prepare individuals for those positions.

(9) The manner in which the area vocational school can best serve its students, and government employers, given the present nature of government employment and vocational training.

(10) The improvements that can be made in existing conditions, either by the area governments or the area vocational school, to assure government of an adequate supply of trained personnel.

As noted earlier, we anticipated no serious problems in identifying the agencies, authorities, positions and employees of each government in each area, but beyond mere identification, complications were foreseen in our deliberate attempts to compile data on the characteristics of those government positions and employees. Since we hypothesized that the problem of school-employer relationships stemmed in large part from deficiencies associated with government employment data--either the data did not exist, was not being communicated, was inaccurate, was not being used, or other problems were involved--we predicted that study difficulties would be encountered in some cities and counties in conducting our surveys of job characteristics (items 1 through 4, above) and our surveys of employee characteristics (item 5, above) because of the possible lack of integrated and organized personnel systems, the recency of adoption of modern personnel systems, the dispersion or lack of records, or uncooperative authorities or employees. Therefore, our attempts to gather information on a government's manpower requirements and employees were regarded both as means of acquiring the data itself and as experiments that would test our hypothesis that such information was a crucial factor in school-employer relationships. The ease or difficulty we had in obtaining basic information about a government's labor force would help define the nature and extent of the information problem: the implications for school-employer relationships would be quite different, for example, if we found that information about government positions existed in easily obtainable, accurate, and usable form, than if we found the opposite. Not only would our inventory of positions be easily completed and somewhat redundant, but if this information were so readily available, it would indicate that some of our concepts relating to the school-employer question were inaccurate, and our focus would have to be shifted. If on the other hand severe problems were encountered in obtaining such basic information this would not only make our task more difficult, but would be evidence that an information problem did exist, and the locus of the problem could be stated; the nature and sources of the problem would be identified through the difficulties encountered in our attempt to collect data, and hopefully, could be corrected. In sum, our job and employee surveys would help serve two research goals: the survey experience itself--the situations we encountered as we pursued each of the proposed research procedures--would yield clues to an understanding of the information problem, and the survey data would reveal the manpower needs of government and the characteristics of the persons currently filling those needs. Thus the results of the study, for the purpose of this report, are expressed in terms of the data collected, the problems encountered in the process of data collection, and the implications those problems have for school-employer relationships.

In the course of the study, some of the assumptions that had guided us in defining the problem of school-employer relationships, that had governed the development of our plan of research and our estimates of the availability, reliability, and pertinence of the data that was to be collected through each of the research procedures, were, in fact, subject to modification. The situations encountered and the information uncovered as the study progressed revealed the extent, probable causes and consequences of the information problem, and the depth and complexity of the pre-service training problems that must be overcome if an ideal set of school-employer relationships is to be established. Much of the research experience itself, therefore, is described in the following sections of this report where--along with the statistical and descriptive data produced by these efforts--it forms a part of the results of this study, as well as a basis for our conclusions and recommendations.

Results

The purpose of the questionnaire was to acquire information about sub-professional state and local government employment in areas where a vocational school operated in close proximity to the place of public employment. This information, in the form of questionnaire responses, was obtained from full-time employees whose place of work was in or close to one of eleven county seat cities that contained an educational institution that was a part of the state-wide system of vocational, technical and adult education. In order to assure that a sufficient representation of the various types of state government employees was obtained, the area, in addition to containing the vocational school, also was one in which 50 or more sub-professional personnel were employed by the State of Wisconsin.

The information obtained was to be utilized in two ways. In the areas where it was collected it would be used, along with additional data, as a basis for establishing a system of communications and a set of procedures for assuring that the needs of government employers for trained personnel would be adequately filled by recruits who had received training from the vocational school that would qualify them for government positions.

In addition to obtaining data for use by employers and schools in specific geographic areas, we sought to obtain an overview of the sub-professional public employee. We felt that our selection of areas would include a wide variety of government work forces of different sizes and types, and that a complete survey of all those positions that did not require a college degree (except for those in police and fire departments and the public schools, whose personnel systems generally were administered apart from the remainder of the public work force) would produce a reasonably complete and accurate picture of the type of government job and employee for which pre-service vocational school training would be possible.

We were interested in determining where these employees had been educated and trained to prepare them for their jobs, how they were recruited, whether they had attended vocational schools, what their jobs were like, whether they thought they needed further training, what types of skills they thought were necessary to qualify them for their jobs, their age when recruited for the job, and other personal, educational, and job information which would help us determine what the potential market was for young people who receive pre-service vocational school training for government positions. These data are reported below.

A total of 6,526 usable questionnaires were returned by state, city and county employees in the eleven areas surveyed. The number of respondents from each area ranged from just under 300 in the least populous area to nearly 1,000 from an area containing two large state institutions--a hospital and state university.

Later in this report, inter-area variations in the size of the sub-professional work force will be discussed. At this point, it should be noted that many factors other than the total population of an area, or the total population served by an institution or agency, determine the size of the sub-professional work force in any given area. The same comment applies to the composition of the work force. Literally, hundreds upon hundreds of different job titles or types of positions were claimed by our respondents, and again, inter-area differences in the number or proportion of persons employed within the same job category, such as typists, accountants, draftsmen, or nurses aides, was not significantly related to the number of persons living in an area nor to the total number of persons served by an institution. All of this suggests that inter-area comparisons or generalizations based on population size alone are likely to be inaccurate.

Slightly more than 40 per cent of all respondents were state employees, and three state agencies (the Department of Public Welfare, Highway Commission, and the State University System) employed more than four-fifths of these state respondents. The Division of Mental Hygiene (Public Welfare Department) had institutions in two of the areas surveyed, a psychiatric hospital and an institution for the mentally retarded. The Division of Corrections (Public Welfare Department) had institutions in three of the eleven areas, a reformatory for young adults, a school for delinquent boys, and a prison for women. Wisconsin State Universities were located in five of the areas, and divisional offices of the State Highway Commission were located in six of the eleven areas.

Other state agencies with less than fifty employees responding from the areas surveyed included the Departments of Agriculture, and Administration, the State Board of Health, the University of Wisconsin Center System, the Motor Vehicle Department, and the Department of Public Instruction's school for visually handicapped children.

Fifty-nine per cent of all respondents worked for local governments, 24 per cent for cities and 35 per cent for counties. No two cities were organized exactly alike. In some, virtually every functional area or service performed by the city was organized in a separate department; in others, there had been some consolidation of functions into single departments. Some cities had municipal bus lines, golf courses, auditoriums, airports, and cemeteries, while others did not. A function performed by a city in one area would be performed by the county in another, or not performed at all, or performed by a private contractor for the city.

By far, the largest number of city employees who responded to the questionnaire were employed by public works departments, or agencies usually considered a part of public works, such as the sewage treatment plant, garbage collection and disposal unit, street department, and so forth. A second allied, but separate and large group of city respondents worked for water departments or water utilities. Parks and recreation, city vocational schools, library, health, engineering, and building inspection departments accounted for most of the other city employees.

County governments were more uniform in their organization than the cities, although there still were significant inter-county differences, both in the type of services performed and in the extent to which services had been consolidated or separated into departments, offices and agencies. However, nearly 90 per cent of the respondents who were employed by counties were working in just four functional areas: county instituions, which generally included hospitals and nursing homes; county highway departments; public welfare departments; and the courts. Institutions, highways, welfare and the judiciary employed 2,014 of the 2,297 county respondents. County Clerks' offices, and Registers' of Deeds each employed nearly fifty additional respondents. The remaining respondents were scattered among Veterans' Service offices, Civil Defense, parks and recreation, mental health clinics, libraries, Treasurers' offices, purchasing, taxation and other departments or offices.

The services performed by an agency are, of course, influential in determining the types of occupations employed by the agency, and the skills needed to perform different occupations will to a large extent determine whether males or females generally are employed in the occupation. A large proportion of respondents were employed by agencies at all three levels of government which were responsible for public works services (the State Highway Commission, county highway departments, and city public works departments), with almost exclusively male work forces, and this probably helps account for the fact that there were nearly a thousand more male than female respondents in the survey. Fifty-seven per cent of the total were men.

The marital status reported by respondents suggested that a disproportionately small number of them (14 per cent) had never been married. Another 11 per cent were widowed, divorced or separated, while three-fourths of the respondents were married at the time of the survey.

The fact that 86 per cent of all respondents were or had once been married might be related to the age of our respondents. We were concerned in this study to determine what the potential employment market was for youth, and if the respondents in this survey accurately reflect the characteristics that a government employer seeks in his sub-professional employees, youth does not appear to be a very important advantage for the job-seeker. Eighty-three per cent of the respondents were age 30 or older at the time of the survey, and proportionately more employees were in each of the older age categories (up to age 60) than in the younger ones. Well over one-third of the respondents had passed the 50 year mark.

If we assume all of our respondents will remain on their jobs until age 65, then approximately 20 per cent of the positions in our survey will become vacant within the ten year period following the survey, due to the fact of retirement alone, and within 5 years 10 per cent of the respondents will have reached retirement age.

Although any definition of "youth" is open to dispute, the persons we had in mind when considering potential employment opportunities for youth trained in vocational schools were those who would enter vocational training after dropping out of or graduating from high school, or possibly after spending a short time in college. Certainly the bulk of these potential trainees and recruits would be below 30 years of age and most of them less than 25 years old.

Our survey revealed there were virtually no teen-agers among our sub-professional respondents (59, or less than 1 per cent), and only about 9 per cent of our respondents were under the age of 25. With less than 10 per cent of all sub-professional positions currently being filled by persons under 25, government employment opportunities for young persons without college degrees appear to be quite limited, especially when we consider the probability that only a fraction of these positions will become vacant annually.

Although at the time of the survey only 580 positions were filled by persons under 25, another 616 employees indicated they had been less than 25 when they first began their present jobs. Therefore, a total of 1,196 respondents started their present jobs at age 24 or less -- this is a little over 18 per cent of all respondents. Over two-thirds of all sub-professional positions either were not entry-level jobs, or if they were, older persons had been recruited to fill them.

The numbers and types of positions, the qualifications for filling those positions, and the age at which persons were recruited for those positions all have changed over the years. To obtain some idea of these changes and to further check on the age when persons have been recruited by government, we calculated the age of our respondents when they were first recruited by their current employers, since we assumed that for some respondents their present occupation would not be the same as their original occupation.

Using these figures we find that the number of respondents who received their first job from their present government employer when they were under age 25 was 1,417, or about 22 per cent of the total. This contrasts with 18 per cent of the current positions which were filled by persons in that age group. This addition of a little over 200 persons in the 24 or under category does not materially alter the conclusion that the sub-professional work force is composed predominately of older persons and that older persons currently are being recruited for these jobs. Over 40 per cent of all our respondents, for example, were age 40 or more when they entered their present positions.

It was possible that most of our respondents had been employed for many years, and if this were the case it would mean that relatively few positions had become vacant in recent years and it could mean that most of the respondents who began their jobs at a youthful age were recent recruits. If this were the case, then the relatively small proportion of positions filled by young persons could be explained by the limited number of vacancies, rather than recruiting policies which were biased against youth, or a scarcity of qualified young persons, either because they did not have the required skills, they were not aware of government job opportunities, or they found non-government employment more attractive.

The total number of years the respondents had been employed by their current government employer ranged from less than one year (3 per cent) to more than thirty years (2 per cent). Nearly one-half of all respondents had been employed for a period of five years or less, and the modal length of employment was one year (931 respondents, or 14 per cent). The category containing the next highest number of employees was two years (701, or 11 per cent). Nearly one-fourth had been employed by the same government for from six to ten years, and another 28 per cent for more than ten years.

The small number of respondents under age 25, coupled with the large number of respondents who had been on the job for less than six years, again strengthens the conclusion that both in recent years and historically youth either have not been aware of government job opportunities, have not been attracted to them, or have not been qualified for them. There were a substantial number of vacancies filled in recent years, but few of these could have been filled by young people. Only 1,196 (18 per cent) of all respondents began work at their present jobs when they were under age 25. Even if every one of these employees was hired during the five year period preceding the survey it still would mean that a minimum of two out of every three jobs that were filled during that period had to be filled by persons 25 years old or older, since a total of 3,427 respondents began their jobs within that recent period.

The occupations at which some of our respondents were employed at the time of the survey were not, as we have seen, the original positions for which they were recruited. The proportion of employees however, who obtained their present positions through promotion, demotion, or transfer did not appear to be very large. Only one-fifth of our respondents listed one or more positions held with their government employer previous to their present position (i.e., their position at the time of the survey), and only 5 per cent reported two or more jobs previous to their present one.

This apparent lack of internal job mobility might be explained in a number of ways. Either the positions surveyed typically do not offer employees an opportunity to advance from one sub-professional job to another, or persons filling these positions typically do not possess the qualifications or desire to do so. Another possibility is that the employing government and/or our respondents do not make much distinction between different classes of positions or between different levels of positions within the same occupational class. An employee originally hired as a Typist I, for example, who has advanced to a Typist III position, may consider her present job to be essentially the same as it always has been, except for an advancement in salary. Similarly, someone employed by a government which places little if any emphasis on the classification of jobs, the use of job titles, or the clear definition of the duties and responsibilities associated with a given position, may feel that he has always held the same position even though his duties and responsibilities may have changed significantly during his period of tenure with the government.

Even taking these possibilities into account, many of the jobs surveyed appear to be "dead-end" or short-term positions, as indicated by the short tenure, and the large number of positions for which older persons were hired. Indeed, nearly as many employees (17 per cent) reported that they had been employed by governments other than their present employing government, as did those who reported more than one job with their present government (20 per cent). Inter-governmental job mobility was almost as high as intra-governmental mobility.

The geographical mobility of the respondents also appears to be low, as implied by their responses to the question of where the employee was born. Obviously, the relationship between a respondent's place of birth and the place where he currently is employed is not a direct measure of his mobility. A respondent employed in the same area where he was born may have moved from the area at an early age, and made many moves before returning to his birthplace. On the other hand, respondents whose birthplace was not within or close to the area where they currently were employed, may have moved to that area at an early age and remained there all of their lives.

Keeping these possibilities in mind it was, nevertheless, interesting to discover that 82 per cent of all respondents were born in the State of Wisconsin and that ten of the seventeen per cent born outside of Wisconsin were born in the neighboring states of Illinois, Iowa, Michigan or Minnesota. (The birthplace of about 1 per cent of the respondents was not ascertained.) Furthermore, 44 per cent of all respondents and 53 per cent of those born in Wisconsin were employed in the same county where they were born. About one-third of all respondents were born in the same city which housed the seat of the county government, the city, or the state agencies which currently employed them.

If many of our respondents had been long-term employees recruited by their current employers as youths fresh out of school, the high proportion found to be employed close to their birthplace would have been expected. However, the work force in our survey was composed largely of relatively older persons who had not been hired as youths, had not been at their jobs for a considerable period of time, and had not experienced much job mobility with their present employer.

Assuming that this combination of characteristics implies that a large proportion of the respondents have been geographically immobile, and that long tenure in or ties to a particular area will tend to increase the number of personal acquaintances in the area, this may help account for the pattern of response to the question of how the employee first learned of the possibility of employment with his present employing government.

Forty-three per cent of all respondents indicated that their original source of information about the possibility of employment by their employing government was "a friend."

Given the following seven possible responses, the respondents were asked to "check the one response which best applies" in answering the question of how they first found out about the possibility of employment by their employing government.

It is, of course, impossible to ascertain from these responses the real nature of recruiting practices used by the governments that were surveyed. Taking these responses at face value it would appear that a highly informal system of recruitment prevails, and that vocational and high schools have had almost no importance as original sources of information about government employment opportunities -- at least for those persons who ultimately became government employees. Teachers and counselors may have guided many more persons into government employment than is indicated, after those persons learned about job possibilities from a friend, an announcement, or some other original source. And a "friend," of course, might have received his information from a teacher, counselor, advertisement or some other formal source. The pattern of communications that takes place from the time an employer makes his needs known to the time that knowledge reaches the potential recruit, could be determined accurately only through extensive interviewing and back-tracking, but the responses below do tell us some of the patterns that do not exist. It is quite apparent, for example, that an "ideal" supply-demand relationship between the schools, employers and recruits does not exist, if by ideal we mean the communication of future needs directly from the employer, to the school, to the incoming student who is trained for the specific government position, and upon completion of training hired by the employer making the original request.

Source	Number	Per cent
From an advertisement or announcement...............	752	12
From a former employer......	676	10
From a vocational school counselor or teacher.......	180	3
From a high school counselor or teacher.................	84	1
From a state employment agency...................	799	12
From a friend...............	2,823	43
Other means.................	1,027	15
N/A........................	185	3

Our respondents were not trained by the schools for future specific government positions, nor did they learn directly about job possibilities from the schools through the less highly-structured system in which the student, after completing his course of instruction, is informed by his teacher or a counselor about government employment opportunities.

The State Employment Service, and advertisements and announcements, each were the original sources of information for approximately twelve per cent of the respondents, and both sources can be considered "formal" in the sense that a direct line of communication from the employer to the recruit through a medium other than "word of mouth," but whose specific function was to inform or attract persons to jobs, was used by the employer.

The other information sources would seem to be, for the most part, informal, or at least not generally considered to be sources whose primary function is to recruit people to jobs. The "friend," as noted, is by far the best recruiter these governments appear to have with over 40 per cent of all respondents indicating friends as their original information source. The friend's information may be first-, second-, or third-hand, that is, for example, communicated from another acquaintance whose source was a state employment agency which in turn learned of the vacancy from an announcement circulated by the employer. The length and direction of the "grape-vine" is indeterminate, but its importance as an instrument of recruitment for the respondents is significant.

Ten per cent of all respondents indicated that "a former employer" was their original source of information on government employment possibilities, and it would be interesting to know more about the circumstances involved in this type of situation. Why would an employer risk losing his employee by informing him of other job opportunities? Were these respondents seeking a return to jobs formerly held after a period of unemployment or employment elsewhere, and told to try the government instead? Were their jobs terminated for some reason (retirement, lay-offs, business failure, etc.) with the same advice or information from their former employers? With 10 per cent listing former employers as information sources this communication pattern seems important enough to warrant further research and explanation.

A variety of information sources were listed by 15 per cent of the respondents who checked "other" rather than the specific sources of information listed on the questionnaire.

The most common "other" source indicated was what might be called their "own initiative." They just walked into the employment office and asked if there were openings. About 6 of the 15 per cent who checked "other" could be so classified. The next largest group in the "other" category stated that an official or employee of the employing government first told them about the possibility of employment.

What appears to be a highly informal communications pattern used for employee recruitment could be a reflection of informal systems of personnel administration and/or, as suggested above, the high proportion of respondents who may have spent a long period of their lives in the same community, whose occupational skills were known by a large number of persons and whose chances of being contacted informally rather than through more formal and impersonal means, would seem to increase. The fact that so few of the respondents learned initially about employment opportunities from school teachers and counselors, so many of them entered government positions at older ages, learned about those positions through personalized, informal contacts, and may be widely known in the community, suggests the possibility that the practice of recruiting specific experienced individuals away from other employers, either without the former employer's cooperation, or with it (recall the 10 per cent who listed "former employer" as their original source of job information) may be fairly wide-spread among government recruiters.

The extent to which government employers have filled positions by recruiting specific individuals away from employment elsewhere in positions similar to the ones for which they are hired by government, is partly answered by responses to another question. This question was designed primarily to determine how important pre-government service, on-the-job experience had been in preparing sub-professionals for government employment. Employees were asked to list any jobs, other than those with their employing government, which they thought had helped prepare them for their present position.

Fifty-eight per cent of all respondents failed to list any previous useful on-the-job experience; fifty per cent actually checked "no," while the other eight per cent left the question blank. If we consider only those employees who responded to the question (i.e., drop the eight per cent for whom no information can be ascertained), either negatively or by listing useful pre-service job experience, approximately 45 per cent of the responding employees did indicate they had previous jobs which helped prepare them for the government position they held at the time of the survey. Twenty-nine per cent had only one such job; fourteen per cent had two; and between two and three per cent of responding employees listed three or more previous jobs where they gained experience for their current job.

Of those with one or more useful previous jobs, the largest single category had worked at those jobs for a total of less than one year (384, or 14 per cent of all those listing previous jobs), but some (about six per cent of the total) had had more than twenty years of useful experience before they were hired by their employing government. Fifty-eight per cent listing previous jobs had worked at those jobs for five years or less.

The fact that about forty-five per cent of responding employees claimed previous valuable work experience should not be surprising considering the age structure of our respondents, which renders it highly unlikely that many of them could have come directly from school to their government job without an intervening period of employment. What is interesting in these figures is that it is frequently suggested that government employment serves as a training ground for large numbers of employees who, because government cannot compete, leave public service once they have acquired the skills needed by other employers. At least forty-five per cent of our responding employees indicate that the movement had been in the opposite direction, that is, that they had gained experience elsewhere which was valuable to them on their government job.

In order to further pursue the recruitment, as well as other questions, an analysis of the most recent such job prior to being hired by their current employer is in order. Again, those who did not respond to the question (about 8 per cent of all respondents) are not included in this discussion. Of the nearly 6,000 responding employees, about 3,300 (55 per cent) indicated they had no previous experience-providing job at all. One-third of all responding employees listed, as their latest place of employment, a private business, industry, or service agency such as a private hospital. Five per cent said their most recent experience was gained while they were employed by a state, city, or county government other than the one which currently employed them. Another six per cent listed the federal government, and most of these listed the military. Less than one per cent listed other types of employers.

Of those with useful pre-service jobs, most (about two-thirds) spent five years or less at the most recent one before their employing government recruited them, and most (63 per cent) appear to have been recruited directly from that most recent job, that is, less than one-year's time elapsed between their pre-service experience and their recruitment by their employing government.

To sum up, again using percentages based only on the total number of respondents for whom complete information is available, forty-five per cent of all employees gained experience which helped prepare them for their current positions prior to being hired by their current government employer. Nearly one-fifth of all employees had more than five years of useful pre-service employment, and a little over one-fourth of all employees came to work for their current government employer within a year or less after leaving their latest place of useful employment.

While pre-service employment was a valuable training ground for a significant number of respondents, not many of the respondents who operated machinery or equipment on their jobs learned their operating skills through pre-service employment. Employees were asked to list the types of machinery, equipment or vehicles they operated on their present jobs, and to indicate where they first learned how to use each item listed. Five alternatives were listed on the questionnaire for the respondent to check: school; present job; earlier job; home; and other.

Only twenty-six per cent of all employees indicated that operating skills were first learned while employed at some job other than the one they presently held, and these earlier jobs, it should be remembered, could have been held either with their present government employer or prior to the time they were recruited by their employing government. Thus, while some 2,700 respondents said they had been employed by someone other than the state, city, or county for which they worked, only about 1,700 claimed that an earlier job, either somewhere else or with their current employer, was where they originally learned the operating skills used on their present job.

School was only slightly more important than a previous job, with about 1,800 employees (28 per cent of all respondents) indicating that their operating skills were originally acquired at some type of school.

An insignificant number (206) of respondents checked "other," or "home" (817 respondents) as places where they first learned to operate equipment or machinery used on their current jobs.

The most important training ground -- by far -- was the present job itself. Nearly half of all respondents (3,072, or 47 per cent) said that at least some of the operating skills used on their present jobs were originally acquired only after they became employed at those jobs. Considering the fact that some positions required none or few operating skills, and that some respondents in jobs requiring such skills failed to answer the question, the high proportion who did indicate that their present job was the place where operating skills were acquired, takes on added significance.

The fact that nearly one-half of all respondents -- at least -- did not acquire some of their job skills until after they acquired their jobs, raises the question of how concerned government employers have been about the formal education and training of their employees, either through formal on-the-job training, or through attendance at schools, either prior to the time of employment or during their period of employment by government.

We were particularly concerned about the relationship between vocational/technical schools and government employees and employers and have seen that vocational school teachers and counselors have been almost totally unimportant as original sources of employment information for the respondents. We also asked employees if their employing government had "ever helped you pay for any of the indirect or direct costs of any" vocational school courses completed by them. Only 247 respondents (less than 4 per cent of the total), answered in the affirmative. Fewer still (136, or 2 per cent of the total) had received assistance from their government employers to complete courses at schools other than vocational schools.

Thus, although well over one-fourth (about 28 per cent) of all respondents indicated that they had completed courses at vocational/technical schools, and about one-fourth indicated course completions at business schools, military schools, colleges, or universities, only a very small fraction of those completing these courses did so with the help of their employing government. It should be emphasized that respondents were asked if they had completed any courses at vocational/technical and other types of schools other than high schools, whether those courses were directly related to their present job or not. Over one-fourth of the respondents had successfully completed vocational/technical school courses, and nearly as many had completed courses at other types of schools, but many of these courses may have been of little, if any, help in preparing the student for his government position.

Since we were interested in determining the actual and potential use of local vocational/technical schools for the pre-service training of sub-professional government employees, we attempted to determine the location of the schools attended, and whether they were attended before or after the respondent began work with his current employing government.

Most of those who did indicate course completions at vocational/technical schools listed a local school (that is, a school located in the same county-area in which the respondent was employed) as the place where that course was taken. About 20 per cent of all respondents completed courses at a vocational school within the county where they were employed; six per cent listed schools within the state of Wisconsin but not in the county where they worked; and only three per cent listed schools outside of the state. A handful (one per cent) who indicated course completions did not list the location of the school, and about nine per cent did not give any response to the question on vocational/technical education.

Of the 1,311 respondents who indicated they had attended the local school, 1,147 gave complete information on the dates of attendance and the date when they began their first job with their current employer. Sixty-nine per cent of these had begun their vocational courses prior to the time they became employed by their current employer; twenty-three per cent attended only after they were employed; and seven per cent attended both before and after they were employed.

It was possible to ascertain, for over 1,500 respondents who indicated some vocational school attendance, either locally or elsewhere, the age at which they first began their vocational schooling. The breakdown for these persons is reproduced below:

Age	Number	Per cent
Under 16..........	51	3
16-19.............	419	27
20-24.............	338	22
25-29.............	211	13
30-34.............	141	9
35-39.............	133	8
40-49.............	196	12
50-59.............	74	5
60 or more........	5	.3

Nearly one-third began their vocational courses at age 19 or less, and over half (52 per cent) were less than 25 years of age when they started. But this leaves a surprisingly large 48 per cent who did not attend until they were past the age group (under 25) which we have roughly categorized as "youth."

Even if we concede that every respondent for whom information on vocational school attendance and/or age could not be ascertained (807 respondents gave no answer, or incomplete answers) may have attended vocational schools, and may have begun their schooling before reaching the age of 25, the maximum number of respondents who might have begun vocational training as youths is 1,615, or 25 per cent of all respondents. It is, of course, more likely that those who failed to answer the vocational school question did not attend school and a more realistic estimate of the number who began vocational school training as youths would be a maximum of around 1,000 respondents -- the 800 who said they did, plus the 200 who said they attended, but failed to provide dates -- or less than 15 per cent of all respondents. Considering the probability that not all of these youths completed courses which helped prepare them for their jobs with government, it seems safe to conclude that only a very small fraction of all of our respondents received vocational school training as youths, in courses which provided them with some of the skills needed to perform their government jobs. In short, it again appears that state and local government employers have not relied upon vocational/technical schools as an important source of young, trained recruits.

Of those who had attended vocational schools, and indicated the most recent date of their attendance, about 47 per cent (741 of 1561) were either attending at the time of the survey, or had attended during one of the five years prior to the survey.

The figures on course completions at schools other than high schools or vocational/technical schools are similar to those on vocational school attendance. About 25 per cent did indicate course completions, 65 per cent answered "no," and approximately

10 per cent did not provide an adequate answer. We have already noted that less than 200 respondents said they had received assistance to attend these schools from their employing government.

In contrast to the figures on the location of the vocational school attended (19 per cent listed local vocational schools, 6 per cent listed other Wisconsin vocational schools, and 3 per cent listed out-of-state schools) most of the non-vocational schools listed by respondents were located in another state. Only 7 per cent listed local schools; 9 per cent listed Wisconsin, non-local schools; and 12 per cent claimed course completions at out-of-state schools. The great majority of those who attended did so prior to their beginning job with their employing government, regardless of where the school was located.

Some of the "other" schools listed by respondents included regular four-year colleges or universities, and despite the fact that the positions surveyed included only those for which college graduation was not a prerequisite for employment, some of our respondents had graduated from a regular four-year college or university (about 6 per cent said they held a BA or its equivalent or had completed work beyond the bachelor's degree) and 9 per cent of all respondents completed some formal college courses.

We have noted that among the original sources of information about government employment the high school counselor or teacher was an even less important source than the vocational school counselor or teacher. Only one per cent of all respondents said high school personnel first told them about the possibility of employment by the government for which they worked. The number of respondents who attended high school, however, was much higher than the number who completed vocational school courses. Over three times as many employees attended high school (78 per cent) and therefore high schools were a considerably more important potential source of original job information than were vocational schools.

Of the respondents who did attend high school, nearly 60 per cent said most of the courses they took were of a general nature, rather than business, technical, or college preparation courses, although a considerable number (16 per cent of all respondents, and 21 per cent of all who attended high school), thought that their courses were mainly oriented to business. An insignificant number (115) took mainly technical courses, and about 16 per cent of those who attended high school, and 12 per cent of all respondents thought their courses were mainly to prepare them for college. As noted above, 9 per cent of all respondents actually did go on to complete some regular college work, and 6 per cent acquired a bachelor's degree or its equivalent.

Twenty-one per cent of all respondents did not attend high school, although nearly all of these persons did complete the 8th grade. Only four per cent said their education stopped before they completed elementary school.

At least 16 per cent of all respondents were high school "drop-outs," that is, they completed the 9th, 10th, or 11th grades.

Only 8 per cent of all respondents had attended high school during the survey year (1966) or in the preceding 5 year period. This finding was to be expected, considering the age structure of the respondents.

Clearly, very few respondents could have been recruited directly out of high schools, just as very few had come directly from vocational school training to their first job with their employing government.

In addition to elementary and high school attendance, and courses completed in vocational/technical schools, business schools, military schools, colleges and universities, employees were asked if they had attended any other lectures, films or demonstrations that were related to their present jobs; what types of subjects were covered; and whether this job-related training was sponsored by their employing government.

Thirteen per cent of the respondents failed to answer this question. It is impossible to tell whether the question was unanswered because the employee could not decide whether the educational sessions he had attended were job-related, or because he had not attended such sessions, or because he simply preferred not to answer. Another 50 per cent said they had not attended any sessions; and 2,428 respondents, or 37 per cent, indicated they had attended. In contrast to the small percentage of respondents who said they had received help from their employer in order to complete courses at schools, 26 per cent of all respondents, and 70 per cent of those who said they attended job-related lectures, films or demonstrations, indicated that their employing government had sponsored or helped pay the costs of this job-related training.

Of the 2,428 respondents who did receive job-related training, 2,346 listed the type of subjects presented in that training. An infinite variety of subjects were listed by the respondents. We attempted to group these into seven categories of training or education, as follows:

1) "Interpersonal relations," which would include communication skills, sensitivity training, and subjects relating to developing an understanding and interest in others.

2) "Personal traits," which would include training to improve the strength, general intelligence, endurance, administrative or management style of the trainee.

3) "Supervisory skills," which would include courses to improve the employee's ability to lead, supervise and make decisions concerning other employers.

4) "Formal education," including school-oriented courses, formal courses directly related to the job, academic disciplines (major, minor, specific fields of learning) institutes, short courses, and so forth.

5) "Official occupational proficiency," which includes courses or subjects leading to a license, certificate of proficiency, etc.

6) "Specific skills," for example, key punch operation, typing, data processing, end-loader operation, tree trimming, and other clerical, manual and mechanical skills.

7) "Job experience," which is included as a separate category since many respondents simply specified "on-the-job training," or "work experience".

Of those who described the training received approximately one-third fell into the "formal education" category, one-third mentioned instruction in "specific skills," and another third were classed in the "job experience" or general on-the-job training category.

Responses to two additional questions which were categorized in the same manner produced a very different pattern of response. Since we were interested in pre-service training we attempted to get the sub-professional's own opinion of what "single most important skill, training or special education, if any, would (he) recommend a person should have to prepare for a job like (his) present job?" Employees were given the opportunity to check "_____ None, or (specify):"

One-fifth of all respondents checked "none". Another nine per cent said they didn't know, or they left the question unanswered. This left 71 per cent who did feel some skill, training, or special education was necessary to prepare a person to perform their jobs. Twenty-eight per cent mentioned specific skills, the ability to operate some type of equipment or machinery, for example, or to perform some task. The next largest percentage (21 per cent) mentioned some type of formal education, that is, they were school-, or course-oriented, mentioned specific fields of study or general education, diplomas or degrees. Ten per cent thought experience was the best teacher, that one could best prepare himself for the job by being employed, by learning by doing. One per cent said, in effect, that the way to obtain the job they held was to obtain official recognition that one was proficient in a particular occupation, that is, to be a journeyman, a Licensed Practical Nurse, obtain a plumber's or electrician's license, etc. The responses of 5 per cent stressed interpersonal relations, that one must develop an interest in others, be able to communicate, to understand others, in order to perform their jobs. Four per cent mentioned certain personal traits, were oriented toward what the individual himself must be able to accomplish by himself, or acquire for himself, or be endowed with, such as strength, intelligence, endurance, etc., rather than what he must be able to accomplish with others. Another 70 respondents (1 per cent) were oriented toward skills with regard to other people, but unlike the four per cent who stressed the ability to understand and be sympathetic toward others, this small group thought that one could best prepare himself for their jobs by acquiring supervisory skills, the ability to lead, supervise or control the actions of others. The final one per cent of all respondents made recommendations which could not be coded in any of the groupings.

Employees also were asked if any further training would be useful to them in doing their present jobs, and were given the opportunity to check "_____None, or (specify)":

A comparison of the responses to the question of what preparatory skills, training, or education the respondents thought one should acquire for their jobs, with their answers to the question of what further training they themselves could use, reveals certain interesting changes in the pattern of response.

While 71 per cent would recommend that some skill, training, education, or even some personal characteristic or trait, or experience, was required of someone in order to be properly prepared for their jobs, only 47 per cent would admit that further training or experience would be useful to them personally in performing their jobs.

A substantial number of respondents -- slightly over a thousand, or 16 per cent -- refused to answer the question or said they didn't know, in contrast to the 9 per cent who refused to comment on whether preparatory training was necessary.

Thirty-six per cent claimed that no further training would be useful to them -- a 16 per cent increase over the number who said no preparatory skills were required.

The responses of nearly half of the 47 per cent who did admit they could use further training (and 22 per cent of all respondents) fell into the category of "formal education;" they were course, program and school-oriented. The next largest group (14 per cent of all respondents) mentioned further training to acquire specific skills. Six per cent of all respondents felt that continued experience on the job was the most useful training for them. One per cent fell into each of the "interpersonal relations," "personal traits," and "supervisory skills" categories, and the final two per cent felt they could use further training, but the type they needed could not be ascertained or classified.

A rough, preliminary profile, or overview (as suggested at the beginning of this chapter) of the sub-professional public employee, may be summarized from the data reported above. It should be stressed that we are talking about sub-professional employees working in counties containing a public vocational school and a state agency employing 50 or more sub-professionals, and that not all state and local government employees within such counties in Wisconsin were included in the survey. The two most populous county-areas, and those with the greatest number of public employees -- Dane and Milwaukee -- contained public vocational schools and state agencies employing 50 or more sub-professionals, but these areas were excluded, on the grounds that they were atypical. Within the 11 county-areas only full-time employees were surveyed and no police, fire, or public schools personnel were included, on the grounds that although they were public employees they were subject to personnel systems that were different, and separated from the system governing other city or county employees. Finally, although all other sub-professional employees of the 11 county governments were surveyed, as well as all those employed by state government in those counties, the only city employees surveyed in the 11-county area were those who worked for the city which was the seat of county government and also contained a public vocational school.

Thus, rather than call this summary an overview of the sub-professional employee of state, city and county governments, it might more properly be called an overview of such employees who work in areas in close proximity to a public vocational school and a major employing agency or institution of state government -- but outside of the state capitol or the state's major metropolitan area.

The broad picture that emerges from the questionnaire responses is one of a work force that was predominately male, married, and over 40 years of age. More than four of every five employees were Wisconsin natives, and most of these were employed in the county where they were born. Nearly four out of five attended high school, and a majority graduated, but few went on to complete any college or university work. Less than one out of three completed vocational school courses and even fewer completed courses at other types of schools. Their employing government was probably the only government for which they have worked, although a substantial number -- but less than half -- had worked for some other employer where they gained experience or skills which helped prepare them for the job they held.

A majority were over 35 years old when they began that job, and more than 3 out of 4 say it is the only job they have ever held with their employing government. They were over 30 years old when that government first hired them, and their original source of information about the possibility of employment by that government probably came through some informal channel, such as a friend. A slight majority had been employed by that government for 5 years or less. Nearly a majority claimed that they did not know how to operate some of the equipment or machinery used on their jobs until after they were employed at that job. Much smaller percentages -- a little over one of every four employees -- said the operating skills they used on the job were first learned in school or at an earlier job. Only about one of every four employees worked for governments which had sponsored or helped pay for lectures, films or demonstrations that were related to the jobs they held, and virtually no employees received assistance from their employers to attend courses at schools.

Only about one-fifth of all employees failed to recommend that there is a single most important skill, education, or training that a person should acquire to prepare himself for the job they held, but over a third felt that no further training would be useful to them in performing their jobs: in fact, a majority either claimed they needed no further training for their jobs or refused to say whether or not they could use additional training.

As noted at the beginning of this chapter, information about the sub-professional state and local work force was obtained from the questionnaire for use by employers and vocational schools in each of the eleven county-areas. The responses of employees were coded, punched on cards, and transferred to tape for computer manipulation. In addition to the total number and percentage of all employees in the survey who were coded in a variety of response categories for approximately 50 separate variables -- data which has been reported above -- a similar set of data was computed for each area. These marginal data (that is, data on the number and percentage of all employees in the survey, and in each county-area, who responded in a particular way), plus several sets of cross-tabulations, were computed for use in the local areas, in order to determine what the relationship was of certain key characteristics of the respondents, to their other characteristics. We felt these cross-tabulations were necessary in order to clarify the picture of the sub-professional, and provide clues to the establishment of an ideal pattern of communication between employers, employees, and the vocational schools.

Five sets of cross-tabulations were obtained, that is, five key variables were cross-tabulated with approximately 50 other variables. These key variables included the agency or department for which the respondent was employed; the original source of information about the possibility of employment with the government for which he worked; whether or not he had ever completed vocational school courses; the highest level of formal education he had completed; and the occupation of the respondent.

The additional data produced by the cross-tabulation of the employing agency variable is of relevance primarily to the agency and the vocational schools who must communicate with it, and the cross-tabulations of the recruitment variable, that is, the original source of information about employment opportunities, adds little to the overall picture of the sub-professional.

That overview, however, would be incomplete without an analysis and description of the educational and occupational status of the respondents, and what relationship the educational and occupational characteristics of respondents had to their other characteristics.

Although some 50 variables were cross-tabulated with the vocational school variable, the level of formal education variable, and the occupational variable, the information produced indicated that all variables were not worthy of discussion, either because no significant relationships existed, because the number of respondents who possessed certain characteristics (who responded in a particular way), was too small to be of statistical significance, or because of the potential danger that false conclusions might be reached either because a high number of respondents either failed to answer a question or gave a response which had to be coded as "not ascertained." For these reasons, we will report data only for those variables of which we are reasonably certain that the probability of distortion is minimal.

Ninety-two per cent of all respondents answered the question relating to course completions from vocational schools or technical institutes. Twenty-eight per cent (1,832) of all respondents indicated that they had completed such courses, 4,151 (64 per cent) said they had not, and eight per cent left the question unanswered.

In order to obtain a clearer picture of the sub-professional employee, and of governments as potential employers of vocationally-trained youths, the characteristics of those respondents who had completed vocational training were compared with those who had not, to determine if the two groups differed in significant ways, and what implications these differences might have for vocational schools, employers, and the relationships between employers and educators. For convenience, those who had completed courses are referred to below as "vocationals," and those who had not as "non-vocationals."

Males, of course, predominated among respondents -- 57 to 43 per cent -- and also were the predominate sex both among those who had completed courses -- the vocationals -- and the non-vocationals. While 56 per cent of vocations were male, 59 per cent of non-vocationals were men. There were eight per cent more males than females among non-vocationals, four per cent more among the total survey population, but only two per cent more among the vocationals. Twenty-eight per cent of all males, and twenty-nine per cent of all females, were vocationals.

Proportionately fewer vocationals than non-vocationals (74 and 77 per cent, respectively) were married and proportionately more had never been married -- 17 per cent of vocationals, compared to 14 per cent of all employees and 13 per cent of non-vocationals, were single. Indeed, one-third of all single respondents were vocationals, as compared to the 28 per cent of all respondents who were vocationals.

The difference between vocationals and non-vocationals in sex and marital status can be attributed only in part to differences in the age distribution of the two groups. It is true that vocationals as a group were younger than non-vocationals, but very significant differences in the age distributions do not appear until comparisons are made of those who were 40 years of age or older. That is, differences of only one percentage point occur between vocationals and non-vocationals in the younger age categories. About one per cent of vocationals and non-vocationals were under age 20 at the time of the survey. Seventeen per cent of vocationals and 16 per cent of non-vocationals were between 20 and 29 years old, and the percentages within the 30-39 age category were 20 per cent for vocationals and 19 per cent for non-vocationals. The age category which contained the largest proportion of vocationals was 40-49 (30 per cent of all vocationals) while age category 50-59 contained the largest proportion of non-vocationals (28 per cent). The most striking difference in the age distribution of the two groups was found in the age 60 or older category. The proportion of non-vocationals in this category was more than double the proportion of vocationals: 10 per cent of all employees were 60 or older, 11 per cent of non-vocationals, but only 5 per cent of vocationals. Among the non-vocationals, 39 per cent were 50 or older, compared to 31 per cent of the vocationals. Thus, although those who had completed vocational courses may be characterized as a younger group, overall, than those who had not, they certainly could not be called youthful: 61 per cent of them were age 40 or more when they were surveyed.

Even fewer differences in the age distributions were found between vocationals and non-vocationals with respect to their ages when they began their first job, or began their current job, with their employing government. A smaller proportion of the vocationals, compared to the non-vocationals, was recruited after they had reached 30 years of age (57 and 59 per cent, respectively), and equal proportions of each group (66 per cent), began the jobs they had at the time of the survey, when they were age 30 or older. Again, the greatest differences between the groups appear in the distributions among the oldest age categories: 10 per cent of vocationals and 13 per cent of non-vocationals were recruited after age 50, while 12 per cent of vocationals, and 16 per cent of non-vocationals, began their current jobs at age 50 or older.

Vocationals and non-vocationals differed significantly in the way they were recruited, or, at least, in the way they first learned of the possibility of being hired by their employing government. We have noted already that most respondents said they received this employment information from informal sources, and this also was true for vocationals as a group. However, vocationals and non-vocationals differed significantly in the proportions of each who listed certain original sources of employment information. Differences of more than two percentage points between the groups were recorded among four original information sources.

One difference which was highly predictable was in the proportion of each group who listed a vocational school counselor or teacher as their original information source. Eight per cent of vocationals, compared to only one per cent of non-vocationals, listed vocational school personnel as their source. Perhaps the difference between the two groups is less revealing than the fact that even among those who had completed vocational courses only a small fraction listed the school as the primary source of employment information.

A higher proportion of vocationals listed advertisements or announcements as their source of information -- 14 per cent versus 10 per cent of the non-vocationals. Significantly lower proportions of vocationals listed former employers (7, versus 12 per cent for non-vocationals), or friends (39 per cent of vocationals and 46 per cent of non-vocationals) as their sources.

Proportionately fewer vocationals said that their current job was the only one they had ever held with their employing government: 73 per cent of vocationals said they had no previous jobs, compared to 80 per cent of non-vocationals and 77 per cent of all respondents.

Since fewer vocationals disclaimed any job mobility with their employing government it might be expected that proportionately more of them than of the non-vocationals would have short tenure on their present jobs. This turned out to be the case, with a significantly higher percentage of vocationals claiming employment in their present positions of five years or less (57 per cent versus 52 per cent for non-vocationals).

The total years employed in all positions with their employing government also was lower for the vocationals, although the difference between the two groups in short-term total employment was not as large. As noted above, five per cent more of the vocationals than of the non-vocationals had served five years or less on their present jobs. But the difference in the proportion of each group who had served a total of five years or less was only three per cent. The respective proportions with total service of five years or less was 49, and 46 per cent. Approximately the same percentages of each group (24 and 23) had a total of 6 to 10 years service, and a higher proportion of the non-vocationals had a total of more than ten years service with their employing government (29 per cent, compared to 24 per cent of the vocationals).

The job mobility of vocationals seems to be higher, not only internally (that is, with their employing government), but in general. For example, 70 per cent of all employees said the only government jobs they ever had were with their current employing government, but 73 per cent of non-vocationals said they had never been employed by other governments, compared to 68 per cent of vocationals who disclaimed such employment.

The difference between the two groups is greater on the question of useful jobs held with employers other than their employing government. By "useful" jobs we mean employment where skills or experiences were acquired which helped prepare the employee for his current job. One-half of all employees said they had never had such employment, compared to 58 per cent of non-vocationals who responded negatively, and only 38 per cent of vocationals.

Differences in the way vocationals and non-vocationals are distributed among a whole cluster of variables indicate that the groups differ not only on the vocational education variable, but on education in general. Vocationals clearly are more apt to be better educated and more likely to be education, skill, or training-oriented than non-vocationals.

For example, one-fifth of all employees thought that no special skill, education or training was required to prepare a person for the type of position that they held. In contrast, 26 per cent of the non-vocationals said none was required, while only 8 per cent of the vocationals denied the need for pre-service acquisition of some skill or knowledge.

Similarly, when asked whether any type of further training would be helpful to them in performing their jobs, over one-third of all employees said further training would not be useful to them, while less than one-fourth of the vocationals denied their need for further training, and over forty per cent of the non-vocationals said no such training would be useful.

The percentage of non-vocationals with an eighth grade education or less was twice as high as the percentage of vocationals (22 and 11 per cent, respectively). Thirteen per cent of the vocationals were high school drop-outs, compared to 18 per cent of the non-vocationals. Among vocationals, 62 per cent were high school graduates and 12 per cent had completed some college work. The corresponding figures for the non-vocationals were 50, and 8 per cent.

Only 58 per cent of the vocationals said they had not completed courses from schools other than high schools and vocational schools, compared to 72 per cent of the non-vocationals.

Finally, exactly one-half of all respondents said they had never attended any lectures, films or demonstrations that were related to their jobs besides the ones they may have attended while completing formal school courses. Five per cent more of the non-vocationals said they hadn't attended such job-related training sessions (55 per cent) compared to five per cent less of the vocationals (45 per cent).

Rather than a detailed description of the variations in the proportion of respondents in each grade level who possessed certain characteristics, the information produced by the cross-tabulation of the level of education variable may be summarized by comparing the percentage of all respondents who were high school graduates with the percentage of graduates among certain response categories.

Sixty-two per cent of all respondents were high school graduates (including those who had graduated and completed some college work). The percentage of graduates was higher, however, among certain types of employees, and lower among others, than it was among the survey population as a whole. For example, 71 per cent of all female respondents were graduated, compared to 62 per cent of all employees and only 55 per cent of the male respondents.

The proportion of graduates also was much higher among employees who had never been married (84 per cent of the single respondents were graduates). A disproportionately high number of graduates were found among respondents whose original source of information about employment opportunities was a high school counselor or teacher (97 per cent), a vocational school counselor or teacher (90 per cent), a state employment agency (82 per cent) and through an advertisement or announcement (71 per cent listing this source were graduates). The proportion was also high among those who said an employee or official of their employing government was their original source (74 per cent). A higher percentage of graduates appeared among those who said they first learned how to operate the machinery or equipment used on their present job while employed at a previous job (67 per cent) and a much higher percentage of those who said they learned at school were graduates (93 per cent), than the proportion of graduates among all employees. Sixty-five per cent of those who learned on their present job also were graduates. Nearly three-fourths of all vocationals had graduated from high school, and disproportionately high numbers of graduates were found among those vocationals whose vocational training began when they were younger. Seventy-seven per cent of those who began their training under age 20, 83 per cent who began between age 20 and 29, 72 per cent of the 30-39 age group and 66 per cent of the age category 50-59 were vocationals. Finally, a higher percentage of graduates than there were among all employees occurred among those who were recruited at an early age (90 per cent of the under 20 group and 75 per cent of the 20-29 year-old recruits, were graduates), and those with the briefest tenure with their employing government.

Conversely, disproportionately low percentages of graduates appeared among those groups of employees who were or had been married, among the older age groups, those with long tenure, and those who said no pre-service training was needed for their positions, no further training would be useful to them, and no other employer had ever employed them at a position where useful experience or skills were acquired.

Lower proportions of those who said friends, former employers, or their own initiative was their first source of employment information, were graduates, than the proportion of graduates among all employees. There was no difference in the proportion of graduates among those who said they had had no previous job with their employing government, no job with any other government, and no job-related training other than regular courses in school.

The characteristics of those respondents who were vocationals or non-vocationals, and those within each of the school grade levels, differ, and in some cases differ significantly when compared to the characteristics of the total survey population, and also when compared to each other. Some of these differences, however, appear to be more closely related to the age of the respondent than to his vocational status or his general level of education. Furthermore, age varies much more significantly with educational level than it does with vocational status. For example, the age structure of the vocational, non-vocational, and the total survey population, all are much more similar to one another, than are the age structures of those within different levels of education.

For example, 28 per cent of all respondents were vocationals, and 36 per cent of all respondents had never graduated from high school. If age and level of education were unrelated we would expect that about 36 per cent of the respondents within each age category would be non-graduates. Similarly, if vocational course completion was not related to age, about 28 per cent of those in each age category would be vocationals. Comparisons of the actual percentage of vocationals and non-graduates among the various age categories reveals that level of education varies much more significantly with age, than does vocational status.

That is, the percentage of vocationals among respondents within each age category varied much less significantly than the percentage of respondents who did not complete high school. Of those respondents who were age 60 or more at the time of the survey, 61 per cent were non-graduates, compared to the 36 per cent of non-graduates among respondents of all ages. The greatest deviation in the percentage of vocationals within an age group also occurred among respondents who were 60 or older but still, 15 per cent of these were vocationals, compared to 28 per cent of all respondents. Only 10 per cent of those under age 20, and 10 per cent who were 20-29 years old had not graduated from high school. But 20 per cent of those in the youngest age category, and 32 per cent of the 20-29 year-olds, had completed courses in vocational schools.

Similarly, vocationals were distributed in about equal proportions among each of the categories of age when the respondents were recruited, while the variation in the proportion of non-graduates was much greater.

To find that vocational education is less a function of age than is the general level of education is perhaps to be expected, but even in response to questions which are less directly related to age, the proportion of vocationals among the respondents in most categories is quite similar. For example, among those whose original source of information about public employment opportunities was an advertisement or announcement, 34 per cent were vocationals. Among those whose source was a former employer, vocationals comprised 20 per cent. Among those who said an agency, friend, government employee or official, their "own initiative," or a high school teacher or counselor was their information source, the proportion of vocationals was, respectively, 32, 25, 26, 26, and 31 per cent. The only information response category in which a disproportionate number of vocationals comprised the total, and therefore where vocational training seemed to be associated with source of information, was the expected source, a vocational school counselor or teacher -- 79 per cent who listed this source were vocationals. The variation in the proportion of non-graduates who comprise each of these response categories is again found to be greater.

In short, while it is true to say that the percentage of vocationals was higher among employees who learned about job opportunities through formal channels, and lower among employees who learned through informal sources, the differences in the percentage of vocationals between the response categories was (with one exception) so small that vocational education seems to be unrelated to the manner in which sub-professionals receive their information and, by implication, the manner in which they are recruited. Put another way, how an employee was recruited depended more upon his general level of education, or his occupation, or his employer, or some combination of these and other factors, than it did upon his having completed courses in vocational schools.

One final measure of the relationship and significance of vocational training to other employee characteristics is the percentage of vocationals in each of 27 broad occupational categories into which the respondents were grouped. Clearly, the variation in the percentage of vocationals in each occupation category is much larger than it was in any of the previous measures, indicating that there may be some relationship between vocational training and the type of job held by the sub-professional employee -- the proportion of vocationals ranges from 11 per cent of all Laundry Workers, to 72 per cent of all Licensed Practical Nurses. But it should also be noted that although the range is great, more than 10 per cent of the respondents in each occupation did complete vocational school courses, and in only two occupations did the number of vocationals exceed 50 per cent of the total. In approximately one-half of the occupations the percentage of vocationals was between 18 and 38 per cent -- a deviation of 10 per cent or less from the total proportion of vocationals among all respondents.

When we again compare these figures with the percentage of non-graduates among the various occupational categories, we can see that while the range is about the same (from 2 to 72 per cent were not graduates, a range of 64 percentage points compared to 61 for vocationals), the difference between occupations is much greater. In nine occupations the percentage of non-graduates was 10 per cent or less, and in seven occupations over 50 per cent of the total were non-graduates.

The percentage of non-graduates deviated from the percentage among all employees by 10 per cent or more in all but 3 of the occupational categories, which suggests that the relationship between occupation and level of education is more meaningful than the vocational/occupational relationship.

Vocational school training among sub-professional employees of state and local government seems to have little special significance. By that we mean that whether or not a person has attended vocational school does not seem to be an important determinant of other characteristics of government employees, and these other characteristics seem to have little significance in determining the vocational-non-vocational status of government employees.

The age, sex, occupation, education, pre- and past-service work experience, mobility, type of employer, and so forth, all seem to make relatively little difference on the vocational status of the employee. On the other hand, if the vocationals seem to be relatively younger, better-educated generally, more inclined to be "education-oriented", to rely on the more formal source of job information, to have more pre-service work experience, more in-service job mobility, and so forth, than do all employees, the possession of these characteristics seems less related to the fact that they have completed vocational school courses than to other factors such as type of occupation, employer, general level of education, or some combination of variables.

An examination of the occupations of the survey population provides a more revealing portrait of the sub-professional employee than does his vocational or educational status. To complete this overview of such employees, a discussion of the positions held by them is in order.

The occupations of our respondents were determined primarily by their answers to two questions, one of which asked them to give the name or title of their present job and the other asked them what they actually did on their present job, and to list their major tasks, duties or responsibilities.

The variety of occupations for which a college degree was not required by the employer was immense. Typically, a city or county employed a work force containing a hundred or more different occupations, and the classification plan for state employees contained over 1,000 different occupations. Even with the elimination of occupations peculiar to employees hired by the board of education, police, and fire departments, and also the elimination of occupations which required college graduation, literally hundreds of distinctly different occupations remained, from Assessors to Zoning Inspectors, Bakers to Welders, Parking Lot Attendants to Purchasing Agents, and practically every other conceivable type of sub-professional occupation.

However, when we considered the total personnel employed in the same occupation by state and local governments within a single county-area, a very small number of persons were employed in most of them. Obviously, some combining of occupations into broad categories of positions which required similar skills, duties, or responsibilities, was necessary, even though every person within the category did not have exactly the same job title, use exactly the same type of equipment, or perform exactly the same type of function.

Considerable effort was spent studying state, county, and city classification plans, job descriptions, and the questionnaires themselves in order to develop a classification of occupations which would accurately group persons with similar jobs, be manageable for computer analysis, and at the same time provide useful data on employee characteristics, by occupation, for employers and vocational schools in specific geographic areas.

Eventually, 90 occupational categories were developed for use in classifying the respondents.

As the questionnaires were coded some of the original categories proved unworkable, and were revised. Generally, the original code provided for more categories than we believed would eventually be useful, or necessary. For example, we designated separate occupational categories for semi-skilled maintenance workers, and for conservation aides, although the official job description for the latter category, and a sampling of some respondents' own descriptions of their jobs, did not seem to describe duties and responsibilities which were materially different from the duties and responsibilities of those described by semi-skilled outdoor maintenance workers. Similarly, separate categories were provided for parks and gardens supervisors, and for all other supervisors of outdoor construction, maintenance and repair personnel. It was felt that these distinctions and others, such as the separation of office machine operators from all other general clerical personnel, and placing account clerks also in a category distinct from other clerical personnel, was required primarily because of the potential differences in the characteristics of the groups that might make a significant difference to the employer and trainer in a specific geographic area.

Distinctions also were provided to reflect the ladder of responsibility, or the ladder of skills involved in similar categories. Thus, for example, where it was apparent that a respondent in, say, a clerical position, who possibly took dictation, did some typing and filing, but emphasized that her primary duties and responsibilities were managing the office, supervising other workers in the office, etc., she was classified as a Clerical Supervisor rather than a general clerical worker. The same distinction was provided for institutional aides and those who supervised the aides, between laundry workers and their supervisors, disposal plant operators and chief operators, and so forth. Similarly, instead of merely providing a broad category of inspection/examination personnel it was divided into the various types of inspection involved -- electrical, plumbing, heating, building, and so forth.

While these distinctions will be useful in the local area, most are too fine to provide meaningful statistical analysis of their characteristics. For example, it makes little sense to describe and compare the characteristics of the 8 "Herdsmen," 9 "Beauticians," or 6 "Meat Cutters," among our respondents, except to say that they make up a very tiny proportion of the sub-professional work force.

For purposes of this report, occupational categories were combined wherever the nature of the duties and responsibilities involved seemed to fit naturally and logically together, and the number of occupational categories eventually was reduced to 23, plus an "all other and n/a" category for those occupations which could not be ascertained or which contained only a very few respondents and could not reasonably be combined with any of the 23 categories.

Some of the remaining 23 categories still contain very few respondents -- Auditors/Accountants, Administrative Assistants, Assessors/Appraisers, and Laboratory Technicians, for example. These classifications were maintained because they were distinctly different from the other occupational categories and therefore could not be combined; they were not simply merged with the "other and n/a" group but seemed worthy of separate analysis either because the nature of these jobs appeared to make them the type of positions quite appropriate to pre-service vocational school training and/or the level of skills required potentially seemed to be relatively high.

Two final categories were computed, which separate respondents into those who held supervisory positions, and those who did not. We felt that the Supervisory/Non-supervisory distinction was necessary for two reasons. First, it was highly unlikely that positions filled by supervisory personnel would be open to young persons, even though they were open to persons without a college degree. Secondly, supervision itself involves certain skills and it may be most meaningful to classify the occupation of a respondent in a supervisory position as a "supervisor", regardless of the type of work being performed by the employees under his direction.

The 23 broad occupational categories include the following:

1) Clerical Supervisors (94). As noted above, these respondents were primarily responsible for supervising other members of the clerical staff in an office.

2) Auditor/Accountant (48). These financial personnel include all respondents with the formal title or duties of an auditor or accountant, plus others whose official title may be tax agent, tax representative, treasurer, assistant treasurer or comptroller, but whose main function is that of an auditor or accountant.

3) Administrative Assistant (37). This category includes personnel who might be described as administrators or managers. Although they may have some supervisory responsibilities over other personnel they are to be distinguished from the Clerical Supervisor in that they also are significantly involved in policy-making. They not only see to it that rules, regulations, and work procedures are followed, but also have a hand in their formulation.

4) Library and Museum Workers (118). For the most part, this category consisted of persons who may be classified as library assistants, working under the supervision of librarians.

5) Account Clerk (157). This group consisted of persons whose main function was the routine maintenance of financial records. They do not perform the skills required of auditors or accountants, nor of general clerical workers and office machine operators.

6) Clerical and Office Machine Operators (1,083). These were general clerical personnel such as typists, stenographers, file clerks, duplicating and adding machine operators, and so forth.

7) Engineering and Planning Technicians (427). This group originally was sub-divided into four categories -- draftsmen, engineering aides, civil engineers, and right-of-way agents. All of these positions require some engineering skills, such as drafting, surveying, testing or inspecting materials, appraising, or preparing, reviewing and negotiating technical documents. The great majority of these persons were employed by the State Highway Commission and had the official state title of engineering aide. It should be noted, however, that the respondents' official title, particularly among the various grades of engineering aides, frequently was not a useful indicator of the duties and responsibilities actually performed, according to the respondents' description of their major tasks, duties, and responsibilities. Only those respondents actually performing skills associated with engineering are included in this category. Some respondents whose official title was engineering aide were performing tasks essentially the same as the unskilled

laborer, while others were spending most of their time performing essentially clerical tasks. These persons were not included in this group of engineering and planning technicians, despite their official title, but were placed in categories which conformed to the work they actually performed.

8) Assessors and Appraisers (30). This group's major function was estimating the financial value of property.

9) Laboratory Technicians (30). Medical assistants who may operate x-ray or dental equipment, and others who work in health laboratories preparing cultures and performing similar tasks are included here.

10) Inspection, Examination, and Enforcement Personnel (239). All of those in occupations whose primary duty was to administer the various regulatory functions of state and local governments through the inspection or examination, and enforcement of state statutes or local codes are included in this category.

11) Storekeepers (49). Basically, these respondents were stock clerks, many of whom do not work in offices but in shops dispensing equipment and supplies.

12) Institutional Supervisor (88). About 37 per cent of all respondents were employed by state or county institutions (excluding institutions of higher education) with inmate or patient populations. The vast majority of respondents employed by these medical or correctional institutions held menial positions, jobs which would seem to require few skills and very limited formal education. These persons were, for the most part, classified as institutional workers, laundry workers, and food service workers. What these three groups shared in common was that their positions related only indirectly to the institutional population. They may guard the premises, or help keep them clean, carry bedpans or trays of food, change or launder linens, etc., but their duties and responsibilities do not extend to the actual treatment or rehabilitation of the institutional population. The distinction between those classified as Institutional Workers, Laundry Workers, and Food Service Workers is that the last two groups were concerned exclusively with jobs in the institution's laundry, or kitchen, while the Institutional Worker may have been employed at a variety of tasks, in a variety of institutional environments. Institutional Supervisors direct the activities of the Institutional Worker class, but not the activities of those who are employed in the laundry or food service categories -- who have their own supervisors. Some of those classified as Institutional Supervisors perform tasks similar to those of the Institutional Worker, but generally they are more skilled, and basically they differed in that their main duty was the supervision of others.

13) Licensed Practical Nurses (69).

14) Rehabilitation Workers (98). These personnel, virtually all of whom are employed by state or county medical or correctional institutions, dealt with the population of these institutions on a very personal, direct basis, and served to rehabilitate that population through counseling, teaching them employment skills, or engaging them in various activities.

The following three categories have been discussed under number 12, above.

15) Institutional Workers (1,028).

16) Laundry Workers (88).

17) Food Service Workers (344).

18) Pump, Engine, and Boiler Operators (156). These employees operated stationary engines, pumps and boilers, a variety of hydraulic or heating equipment, and were employed primarily by municipal water utility and sewage disposal plants, or operated the heating plants of state institutions.

19) Skilled Craftsmen (408). This category includes all employees who repaired or maintained equipment, machinery, or buildings, such as carpenters, plumbers, painters, electricians, mechanics, welders, blacksmiths, meter repairmen and those with a combination of such skills, as well as their supervisors or foremen.

The next three categories comprise the major occupational grouping we have classified as outdoor construction, maintenance and repair workers, and generally reflect, also, the path of advancement of those who are employed in an outdoor environment and in positions involving some skills. That is, typically, as one acquires seniority he will move out of the Semi-skilled category and assume the operation of vehicular and other types of light equipment, move on to the heavier and more sophisticated machinery or equipment and some, eventually, move into the position of supervisor or foreman.

20) Semi-skilled (269). These persons generally use some of the skills of carpenters, painters, electricians, and landscapers, and the tools, equipment or machinery of tree-trimmers, masons, and those items used in the repair or construction of streets, curbs and gutters, water and sewer mains, and so forth. These semi-skilled operatives generally do not operate vehicular equipment, although occasionally the situation may demand that they drive a light truck.

21) Foremen and Supervisors (111). This group directs the activities of the preceding and following occupational categories.

22) Equipment Operators (789). The exclusive job of this group is equipment operation, including the whole range of equipment from light trucks through bulldozers and graders.

23) Unskilled Labor and Custodial (635). This final category of occupations includes all janitoral personnel whose primary duties involved sweeping, washing and dusting, and all common laborers.

We noted earlier the high percentage of respondents who were native to the state and also to the county in which they were employed. Among the 23 occupational classifications, over 50 per cent of the respondents in 4 occupations -- Equipment Operators, Foreman/Supervisors, Account Clerks, and Clerical/Office Machine Operators -- were born in the county where they were working at the time of the survey. What these occupations had in common, other than the fact that a majority of their members were working close to their birthplace, was that a relatively high proportion of their members were recruited when they were young, a majority of their members were employed by local government, rather than the state, and the range of skills required to perform their jobs was fairly narrow.

On the other hand, those occupations in which a relatively large proportion of their members either worked for the state, were recruited later in life, or had highly specialized duties or responsibilities, tended to contain proportionately fewer natives, either to the state or to the county-area where they were employed (See Table 1).

Table 2, which shows the age of employees in various occupations, confirms the belief that very few occupations were staffed predominantly by youth. Not only were 64 per cent of all respondents 40 years old or more, but in only two occupations did the proportion of respondents under age 40 comprise a majority of their members -- Clerical/Office Machine Operators and Engineering and Planning Technicians; and these two occupations where the real potential for youth seemed greatest contained less than one-fourth of all respondents. In about half of all occupations, containing about half of all respondents, one-third or less of their members were under 40 years of age at the time of the survey.

As is shown in Table 3, the level of formal education varied considerably with occupation, and while a college degree may not have been a formal prerequisite for any of these occupations, a high school diploma seems to have been a virtual requirement for some, while others contained a very small percentage of graduates.

TABLE 1

BIRTHPLACE OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees whose birthplace was:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
In county where employed	36	33	32	36	57	50
Elsewhere in Wisconsin	47	42	43	35	29	32
Outside of Wisconsin	16	25	24	27	14	18
N/A	1	0	0	2	0	0

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
In county where employed	37	43	20	41	41
Elsewhere in Wisconsin	48	33	50	42	47
Outside of Wisconsin	15	23	30	16	12
N/A	0	0	0	0	0

* May not total 100% due to rounding

(table continued)

Per cent of employees whose birthplace was:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
In county where employed	27	32	23	33	40	33
Elsewhere in Wisconsin	55	39	55	43	39	45
Outside of Wisconsin	18	26	20	23	22	18
N/A	0	3	1	1	0	1

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
In county where employed	38	44	48	57	62
Elsewhere in Wisconsin	46	38	36	35	29
Outside of Wisconsin	15	17	13	7	8
N/A	1	1	2	1	1

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
In county where employed	49	29	40	44	44
Elsewhere in Wisconsin	34	53	43	38	38
Outside of Wisconsin	16	18	17	17	17
N/A	1	0	1	1	1

TABLE 2

AGE OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees whose age in 1966 was:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
Less than 30 years old..................	10	4	8	30	21	39
30 - 39 years old......................	16	27	18	10	15	14
40 years old or more..................	73	69	73	60	62	47
N/A..................................	1	0	0	0	2	1

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Less than 30 years old..................	24	10	10	7	12
30 - 39 years old......................	39	23	27	28	18
40 years old or more..................	36	67	60	65	69
N/A..................................	0	0	3	1	0

* May not total 100% due to rounding

(table continued)

Per cent of employees whose age in 1966 was:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Less than 30 years old..............	2	25	22	17	3	9
30 - 39 years old..................	20	12	26	19	10	12
40 years old or more...............	77	64	52	63	85	78
N/A................................	0	0	0	1	1	1

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Less than 30 years old..............	5	2	13	3	7
30 - 39 years old..................	20	18	22	13	23
40 years old or more...............	75	79	65	85	69
N/A................................	0	1	1	0	0

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Less than 30 years old..............	8	11	5	17	16
30 - 39 years old..................	15	20	14	20	19
40 years old or more...............	77	67	81	63	64
N/A................................	0	2	1	1	1

TABLE 3

FORMAL EDUCATION OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

Per cent* of employees who completed:	Occupational Classification					
	1	2	3	4	5	6
	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
Less than 8th grade	0	0	0	0	0	0
8th grade	0	0	0	1	1	2
1-3 years of high school	2	2	3	2	3	3
High school	87	81	59	43	80	84
Some college	10	17	38	52	15	11
N/A	1	0	0	3	1	0

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Less than 8th grade	0	0	0	0	2
8th grade	2	0	3	4	10
1-3 years of high school	7	10	7	8	6
High school	72	50	50	67	73
Some college	18	40	37	18	6
N/A	1	0	3	1	2

* May not total 100% due to rounding

(table continued)

Per cent of employees who completed:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Less than 8th grade..................	1	1	0	2	4	6
8th grade............................	3	6	6	18	26	25
1-3 years high school................	12	11	18	24	33	25
High school..........................	69	71	53	47	31	38
Some college.........................	10	10	18	6	1	4
N/A..................................	3	0	4	3	5	2

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Less than 8th grade..................	4	5	6	9	10
8th grade............................	15	27	21	23	33
1-3 years high school................	30	21	26	22	23
High school..........................	46	41	41	37	30
Some college.........................	6	5	4	6	1
N/A..................................	1	1	3	5	3

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Less than 8th grade..................	10	3	2	4	4
8th grade............................	30	11	14	16	16
1-3 years high school................	23	13	16	16	16
High school..........................	32	51	56	53	53
Some college.........................	3	19	10	9	9
N/A..................................	3	3	3	2	2

All of the common office occupations such as Clerical/Office Machine Operators, Account Clerks, Administrative Assistants, Clerical Supervisors, and Auditor/Accountants, counted five per cent or less of their members as non-graduates. Ten to 25 per cent of the members of eight occupations had not graduated from high school. These occupations, and the per cent of non-graduates were as follows: Engineering and Planning Technicians -- 9 per cent; Assessors/Appraisers -- 10 per cent; Laboratory Technicians -- 10 per cent; Inspection/Examination workers -- 12 per cent; Institutional Supervisors -- 16 per cent; Storekeepers -- 18 per cent; Licensed Practical Nurses -- 18 per cent; and Rehabilitation Workers -- 24 per cent.

A sharp break in the percentage of non-graduates occurred between the institution employee who was engaged in essentially rehabilitative activities, and the Institutional Worker class. While 24 per cent of the Rehabilitation Workers had no diploma, 44 per cent of the Institutional Workers were non-graduates. About half of the Pump, Engine, and Boiler operators were non-graduates, and a majority of the members of the remaining seven occupations had not graduated from high school: Skilled Craftsmen, and Semi-skilled -- both 53 per cent; Foreman/Supervisors -- 54 per cent; Food Service Workers -- 56 per cent; Laundry Workers, and Unskilled Labor and Custodial -- each 63 per cent; and, finally, two-thirds of the Equipment Operators failed to complete high school.

It was suggested earlier, and is confirmed in Table 4, that vocational school experience varied more by occupation, than occupation varied among those who had or did not have vocational school experience. While some members of all occupational groups completed vocational school courses, the percentage of vocationals was very high among some groups, and very low among others. More than two-thirds of the Assessor/Appraiser group completed courses and 72 per cent of the Licensed Practical Nurses reported such completions. A majority of no other occupation's members were vocationals, although the proportion exceeded 40 per cent among Clerical Supervisors, Administrative Assistants, Account Clerks, Engineering and Planning Technicians, Laboratory Technicians, and Skilled Craftsmen. All except the last of these occupations, and the only exclusively blue-collar occupation among them, had a high proportion of high school graduates, also. Table 5 reports the percentage who attended the local vocational school.

Except for the Licensed Practical Nurse, none of those occupations which were employed almost exclusively by institutions had a high proportion of vocationals, but, as is shown in Table 6, the proportion of their members who attended job-related training sessions (lectures, films and demonstrations, but not formal courses in schools), was among the highest of all occupations. These institutional occupations (numbers 12 through 17), except for the Laundry

TABLE 4

VOCATIONAL SCHOOL EDUCATION OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees who have:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
Completed vocational school courses......	44	29	41	27	46	40
Not completed vocational school courses..	51	67	51	63	49	57
N/A....................................	5	4	8	10	5	4

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Completed vocational school courses.....	41	67	47	35	27
Not completed vocational school courses.	54	27	47	56	65
N/A....................................	5	7	7	9	8

* May not total 100% due to rounding

(table continued)

Per cent of employees who have:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Completed vocational school courses ...	22	72	28	16	11	17
Not completed vocational school courses	64	19	62	70	70	70
N/A	15	9	10	14	18	13

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Completed vocational school courses....	38	49	20	21	15
Not completed vocational school courses	56	46	71	67	80
N/A	6	6	9	13	5

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Completed vocational school courses....	17	26	31**	27**	28
Not completed vocational school courses	73	62	57	64	64
N/A	10	12	12	9	8

**Estimate

TABLE 5

LOCAL VOCATIONAL AND TECHNICAL SCHOOL TRAINING OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

Occupational Classification	Has Employee Ever Completed Any Course At Local School?*					
	Yes		No		N/A	
	N	%	N	%	N	%
Clerical Supvr. (N=94)	32	34	56	60	6	6
Auditor/Accountant (N=48)	12	25	34	71	2	4
Admin. Asst. (N=37)	11	30	22	59	4	11
Library, Museum Wkr. (N=118)	27	23	78	66	13	11
Account Clerk (N=157)	57	36	90	57	10	6
Clerical/Off. Mach. Oper. (N=1,083)	365	34	671	62	47	4
Engr., Plan. Tech. (N=427)	115	27	289	68	23	5
Assessor/Appraiser (N=30)	17	57	11	37	2	7
Lab. Tech. (N=30)	9	30	19	63	2	7
Inspect./Examin. (N=239)	52	22	160	67	27	11
Storekeeper (N=49)	12	24	33	67	4	8
Inst. Supvr. (N=88)	11	13	63	72	14	16
Lic. Pract. Nurse (N=69)	29	42	31	45	9	13
Rehab. Wkr. (N=98)	9	9	79	81	10	10
Inst. Wkr. (N=1,028)	105	10	775	75	148	14
Laundry Wkr. (N=88)	7	8	65	74	16	18
Food Service Wkr. (N=344)	37	11	261	76	46	13
Pump, Eng., Boiler Oper. (N=156)	32	21	110	71	14	9
Craftsman, Skilled (N=408)	123	30	252	62	33	8
Semi-Skilled (N=269)	34	13	208	77	27	10
Foreman/Supvr. (N=111)	16	14	79	71	16	14
Equip. Oper. (N=789)	95	12	654	83	40	5
Unskilled Labor and Custodial (N=635)	85	13	482	76	68	11
All Other and N/A (N=131)	18	14	97	74	16	12
All Employees (N=6,526)	1310	20	4619	71	597	9

*"Local" school refers to school located in area where respondent is employed.

TABLE 6

IN-SERVICE TRAINING OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

Per cent* of employees whose in-service experience includes:	Occupational Classification					
	1 Clerical Supvr. (N=94)	2 Auditor/ Accountant (N=48)	3 Admin. Asst. (N=37)	4 Library, Museum Wkr. (N=118)	5 Account Clerk (N=157)	6 Clerical/ Off. Mach. Oper. (N=1,083)
Job-related training..................	48	37	43	36	22	24
No job-related training...............	48	48	46	54	69	68
N/A...................................	4	15	11	10	9	8

	7 Engr., Plan. Tech. (N=427)	8 Assessor/ Appraiser (N=30)	9 Lab. Tech. (N=30)	10 Inspect./ Examin. (N=239)	11 Store-keeper (N=49)
Job-related training..................	58	87	47	62	19
No job-related training...............	35	13	47	32	67
N/A...................................	7	0	6	6	14

* May not total 100% due to rounding

Per cent of employees whose in-service experience includes:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Job-related training............	95	74	67	60	18	45
No job-related training.........	3	13	23	25	50	34
N/A	2	13	10	15	32	20

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Job-related training..........	28	24	19	44	14
No job-related training.......	60	49	65	31	70
N/A...........................	12	27	16	25	15

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Job-related training..........	8	45	59	36	37
No job-related training........	64	39	29	51	50
N/A...........................	28	16	12	13	13

Workers, apparently relied heavily on in-service, or on-the-job training to maintain, or upgrade the skills of their members. Those who relied least on this type of education were the blue-collar occupations (except the Foreman/Supervisor class), including Storekeepers, and also Account Clerks, and Clerical and Office Machine Operators.

In a sense, Table 7 reflects these differences between occupations in the extent to which they relied on schools and on-the-job training or experience to acquire skills. This table should be read cautiously, since it merely reports the percentage of persons within each occupation who said that one or more of their operating or manual skills was first acquired at the place indicated. Thus, the total for each occupation will not add to 100 per cent. since some respondents checked none of the places -- if they used no equipment or machinery, or manipulated no tools or instruments -- while others may have checked more than one of the places if they acquired their skill to use different items, at different places.

The importance of formal education, that is, a school of some type, as a means of acquiring operating skills, was generally related to the type of occupation being performed, just as the level of formal education varied with type of occupation. All of those nine occupations, noted above, in which the proportion of non-graduates exceeded 40 per cent, ranked low in the proportion of their members who learned their skills at school. Five per cent or less of the Unskilled Labor and Custodial, Equipment Operator, Institutional, Laundry, and Food Service Workers, and only 9 per cent of the Semi-Skilled, 11 per cent of the Pump, Engine, and Boiler Operators, and 20 per cent of the Skilled Craftsmen, said some of their skills were learned at school. A very large percentage of the members of all these occupations, except Institutional Workers, learned their skills on the job, with over 60 per cent of the Pump, Engine, and Boiler Operators, Equipment Operators, and Semi-Skilled employees, claiming they did not acquire some of their skills until they were employed in the jobs they currently held.

School was also unimportant to the Rehabilitation Worker, Institutional Supervisor, Assessor/Appraiser, and the Inspection/Examination employees, but relatively small percentages of the members of these occupations checked any of the places where skills were learned, most probably because these occupations required few operating skills.

The importance of the job itself, and particularly their current job, as a place where skills were acquired, was not restricted to the blue-collar occupations. About 50 per cent of Auditor/Accountants, Library and Museum Workers, and Laboratory Technicians learned some of their skills while employed in the jobs they held, and a

TABLE 7

WHERE JOB SKILLS WERE ACQUIRED BY SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees who report job skills were first learned:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
At school........................	85	77	51	64	87	86
On present job..................	65	50	43	49	56	57
On previous job.................	37	35	38	11	43	33
At home..........................	2	12	5	9	4	5
Other............................	3	2	0	2	2	2

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
At school........................	32	27	57	17	47
On present job..................	56	27	50	40	39
On previous job.................	24	33	40	17	40
At home..........................	13	30	10	13	14
Other............................	3	3	3	1	2

---

* May not total 100% due to employees who checked more than one response category, or indicated no skills.

(table continued)

Per cent of employees who report job skills were first learned:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
At school......................	10	38	22	3	3	2
On present job.................	33	26	26	26	57	43
On previous job................	12	17	16	7	12	15
At home........................	15	0	18	6	7	6
Other..........................	0	4	5	2	1	0

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
At school......................	11	20	9	12	3
On present job.................	65	44	63	48	61
On previous job................	47	48	38	32	36
At home........................	14	24	28	22	19
Other..........................	7	7	7	3	6

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
At school....................	5	31	29	28	28
On present job...............	42	28	49	47	47
On previous job..............	20	26	30	26	26
At home......................	13	33	14	12	12
Other........................	3	3	3	3	3

substantial majority of Account Clerks, Clerical/Office Machine Operators, Clerical Supervisors, and Engineering and Planning Technicians, were trained, either formally, or self-taught, after they became employed in their occupations.

A majority of the members of only seven of the 23 occupations said that school was where they acquired some of their skills, and these occupations also ranked high in the proportion of their members who were high school graduates.

The acquisition of some special skill, some training, or education, prior to being appointed to these sub-professional occupations, was considered necessary by 71 per cent of all respondents, and as Table 8 indicates, a substantial majority of persons in all occupations except Equipment Operators, Laundry Workers, and Unskilled Labor and Custodial positions, agreed that skill, training, or education prior to employment in their jobs was needed. Although the three groups without a majority ranked at the bottom in the proportion of members who were high school graduates, other occupations that ranked low in formal education contained a very high proportion of members who felt pre-service education or skills were prerequisites for their jobs -- see especially the percentages for Pump, Engine, and Boiler Operators, and Skilled Craftsmen.

Did the respondents feel they were fully-trained to perform their jobs, or could further training help them do a better job? Although substantial majorities in all but three occupations felt pre-service training or experience was a necessity, less than half of all respondents, and less than half of the respondents in eight occupations said additional training would be useful to them (See Table 9). The most dramatic shifts in the proportion of an occupation's members who said pre-service training, and post-service training, was needed, occurred among the Account Clerks, Clerical/Office Machine Operators, and Storekeepers, occupations whose members ranked reasonably high in formal education, but where the skills, duties, and responsibilities required were rather narrow or routine. Although 89, 88, and 90 per cent of respondents in these occupations thought pre-service training was necessary, only 48, 44, and 48 per cent of them, respectively, thought further training for them would be useful.

The smallest shift occurred among the Assessor/Appraiser group, 100 per cent of whom thought both pre-service and post-service training was needed. The shift also was slight among Administrative Assistants. Generally, the need for additional training was felt most strongly by those in the more technical occupations, by those in positions with considerable responsibility, and among the more highly-skilled blue-collar occupations.

TABLE 8

JOB PREPARATION AS SEEN BY SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

Per cent* of employees who indicate skill, training, or education prior to employment was:	Occupational Classification					
	1	2	3	4	5	6
	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1.083)
Needed	95	98	73	90	89	88
Not needed	1	2	0	2	8	8
N/A	4	0	27	8	3	4

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Needed	90	100	97	83	90
Not needed	4	0	0	12	4
N/A	6	0	3	5	6

---

* May not total 100% due to rounding

Per cent of employees who indicate skill, training, or education prior to employment was:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Needed	87	89	92	76	39	57
Not needed	4	1	4	14	52	28
N/A	9	10	4	10	9	15

	18	19	Outdoor Const., Maint., Repair		
	Pump, Eng., Boiler Oper. (N=156)	Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Needed	85	83	54	76	44
Not needed	6	7	34	8	44
N/A	9	10	12	16	12

	23	24	All Occupations		
	Unskilled Labor and Custodial (N=635)	All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Needed	34	84	88	70	71
Not needed	54	4	4	21	20
N/A	12	12	8	9	9

TABLE 9

CURRENT TRAINING NEEDS AS SEEN BY SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees who indicate further training for them was:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
Needed	66	77	70	71	48	44
Not needed	24	17	19	19	40	42
N/A	10	6	11	10	11	14

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Needed	78	100	83	70	48
Not needed	13	0	10	17	30
N/A	9	0	7	13	22

* May not total 100% due to rounding

(table continued)

Per cent of employees who indicate further training for them was:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Needed	70	75	72	54	21	38
Not needed	14	12	10	24	65	38
N/A	16	13	18	22	14	24

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Needed	61	65	40	52	21
Not needed	22	19	43	22	63
N/A	17	16	17	26	16

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Needed	19	66	67	47	48
Not needed	65	17	17	37	36
N/A	16	18	16	16	16

Turning, finally, to the question of recruitment and its relationship to occupation, we know that most employees do not rely on the "formal" avenues of recruitment as their original source of information about employment opportunities. Only 28 per cent learned of the possibility of being hired by their employing government through advertisements, announcements, employment agencies, and school counselors or teachers. There were, however, significant variations among the occupations.

Formal channels of recruitment were most important for respondents in the white-collar, clerical-type of occupations (see Table 10, numbers 1 through 6). Fifty-six per cent of all Clerical/Office Machine Operators, and 50 per cent of the related occupations of Clerical Supervisor and Administrative Assistant were informed through formal sources, while 44 per cent of the related occupations of Account Clerk and Auditor/Accountant, and 42 per cent of Library and Museum Workers were similarly informed.

Among those occupations which were employed primarily by institutions (numbers 12 through 17), the reliance upon informal sources was much greater, and as the level of skills and responsibilities of the occupation increased, so did the tendency to rely on formal sources to recruit employees. Only 18 per cent of Laundry and Food Service Workers, 20 per cent of Institutional Workers, and 28 per cent of Rehabilitation Workers, were initially recruited through formal channels, while 31 per cent of the Institutional Supervisors, and over a third of the Licensed Practical Nurses said they were informed through such channels. Indeed, the highest proportion of any occupation's members whose source was vocational or high school personnel was the Licensed Practical Nurse, 14 per cent of whom learned through the schools, in contrast to 4 per cent of all respondents.

Less than a fourth of the members of any blue-collar occupation, including Storekeepers and the Unskilled Labor and Custodial groups, were recruited by formal means, and virtually none of them learned through the schools.

Engineering and Planning Technicians, and Inspection/Examination personnel, counted similar proportions of their members who were formally recruited, 35 and 37 per cent, respectively, while Assessor/Appraisers, and Laboratory Technicians, while possessing several characteristics in common (e.g., level of education, and age) differed radically, with 60 per cent of those in the former occupation (the highest proportion among all occupations) recruited through formal sources, in contrast to 27 per cent of the Laboratory Technicians.

The age at which members of the various occupations were first recruited by their employing governments is shown in Table 11,

TABLE 10

RECRUITMENT OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

Per cent* of employees who were recruited through:	Occupational Classification					
	1	2	3	4	5	6
	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1,083)
An ad., announcement, or agency.........	38	40	39	35	32	44
A school counselor	12	4	11	7	12	12
All other means	49	54	51	57	57	43
N/A	1	2	0	2	0	1

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
An ad., announcement, or agency..........	27	60	20	36	20
A school counselor......................	8	0	7	1	2
All other means.........................	65	40	73	61	74
N/A	1	0	0	1	4

* May not total 100% due to rounding

(table continued)

Per cent of employees who were recruited through:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
An ad., announcement, or agency	30	20	20	19	18	17
A school counselor....................	1	14	8	1	0	1
All other means.......................	68	62	68	78	80	77
N/A	1	3	3	2	2	6

	18	19	Outdoor Const., Maint., Repair		
	Pump, Eng., Boiler Oper. (N=156)	Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
An ad., announcement, or agency	22	22	16	11	5
A school counselor..................	2	0	0	0	0
All other means.....................	74	76	76	88	90
N/A	1	2	7	1	5

	23	24	All Occupations		
	Unskilled Labor and Custodial (N=635)	All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
An ad., announcement, or agency......	14	27	26	24	24
A school counselor..................	2	3	4	4	4
All other means.....................	78	68	69	69	69
N/A.................................	6	2	1	3	3

and these age breakdowns by occupation stand in sharp contrast to the figures presented in Table 2, which gave the age of respondents at the time of the survey. We know that only 16 per cent of all respondents were under 30 at the time of the survey, but more than double that proportion were young when they began work with their current employer. This percentage, while still disappointingly low, so far as opportunities for youth have been concerned, indicates when compared to the age of respondents at the time of the survey, that some respondents have had long tenure with their employer, and that there has been some occupational shifting by respondents. The figures on age at the time of the survey, age when first recruited, and the total number of years respondents have been employed (Table 12), are considered together, because of their obvious inter-relationship.

If the job opportunity potential for youth can be gauged by the proportion of respondents in each occupation who were below a certain age level, then the prospects for young persons appear quite limited for all but a few sub-professional occupations. Even if we select a relatively high age level -- 30 -- as the dividing line, we find that only 16 per cent of all respondents (and hence, 16 per cent of all positions, regardless of occupation), were young persons.

The proportion of youth employed in each occupation varied from two per cent of all Skilled Craftsmen and all Institutional Supervisors to 39 per cent of all general clerical workers (that is, Clerical, and Office Machine Operators). The proportion of young persons exceeded one-fifth of the total for only 6 occupations: Rehabilitation Workers, Library and Museum Workers, Account Clerks, Licensed Practical Nurses, Engineering and Planning Technicians, and the general clerical group. These 6 occupations where the opportunities for young persons seemed greatest comprised only 30 per cent of all respondents.

As would be expected, the tenure (total length of employment) of persons within these 6 occupations was shorter, generally, than the tenure of persons in most other occupations. Licensed Practical Nurses had the shortest tenure of all occupations, with 67 per cent having served 5 years or less with their employing government. One-fourth of them were under 30, and 29 per cent said they were under 30 when first recruited.

A similar percentage of Clerical/Office Machine Operators (66 per cent) had been employed 5 years or less, but half of these employees were under 30 when recruited.

Thirty per cent of Library and Museum Workers were under 30, with 63 per cent having short tenure, and 42 per cent recruited as youths.

TABLE 11

AGE WHEN SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES WERE RECRUITED: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees whose age when employed was:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1.083)
Less than 30 years old............	46	46	32	42	40	50
30 - 39 years old.................	28	27	46	18	22	19
40 years old or more..............	22	25	19	36	34	28
N/A...............................	4	2	3	4	4	3

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
Less than 30 years old............	68	27	33	35	37
30 - 39 years old.................	15	33	30	32	16
40 years old or more..............	14	40	33	29	42
N/A...............................	2	0	3	4	4

* May not total 100% due to rounding

(table continued)

Per cent of employees whose age when employed was:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
Less than 30 years old	34	29	35	26	11	16
30 - 39 years old	28	19	24	24	20	20
40 years old or more	33	42	35	42	59	56
N/A	4	10	6	7	9	8

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
Less than 30 years old	33	25	33	43	34
30 -39 years old	32	27	27	26	31
40 years old or more	31	41	27	15	24
N/A	4	7	13	15	11

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
Less than 30 years old	16	39	36	35	35
30 - 39 years old	24	21	28	24	24
40 years old or more	53	33	28	35	35
N/A	8	8	9	6	6

TABLE 12

TENURE OF SELECTED WISCONSIN STATE AND LOCAL GOVERNMENT EMPLOYEES: BY OCCUPATION, 1966

	Occupational Classification					
	1	2	3	4	5	6
Per cent* of employees who have been employed:	Clerical Supvr. (N=94)	Auditor/ Accountant (N=48)	Admin. Asst. (N=37)	Library, Museum Wkr. (N=118)	Account Clerk (N=157)	Clerical/ Off. Mach. Oper. (N=1.083)
5 years or less	29	35	39	63	47	66
6-10 years	16	17	11	18	21	17
11-20 years	28	27	32	13	24	12
More than 20 years...................	26	19	18	4	7	4
N/A	1	2	0	2	1	1

	7	8	9	10	11
	Engr., Plan. Tech. (N=427)	Assessor/ Appraiser (N=30)	Lab. Tech. (N=30)	Inspect./ Examin. (N=239)	Store-keeper (N=49)
5 years or less.....................	29	43	43	43	46
6-10 years	38	30	13	23	22
11-20 years	28	23	37	26	16
More than 20 years...................	5	3	7	7	14
N/A	0	0	0	1	2

* May not total 100% due to rounding

(table continued)

Per cent of employees who have been employed:	12 Inst. Supvr. (N=88)	13 Lic. Pract. Nurse (N=69)	14 Rehab. Wkr. (N=98)	15 Inst. Wkr. (N=1,028)	16 Laundry Wkr. (N=88)	17 Food Service Wkr. (N=344)
5 years or less	24	67	59	58	49	52
6-10 years	30	10	26	22	27	25
11-20 years	39	9	9	13	15	15
More than 20 years	6	7	2	3	6	3
N/A	2	7	4	4	3	6

			Outdoor Const., Maint., Repair		
	18 Pump, Eng., Boiler Oper. (N=156)	19 Craftsman, Skilled (N=408)	20 Semi-Skilled (N=269)	21 Foreman/ Supvr. (N=111)	22 Equip. Oper. (N=789)
5 years or less	25	36	36	16	29
6-10 years	24	22	26	14	25
11-20 years	36	30	27	36	31
More than 20 years	14	9	7	29	11
N/A	1	3	4	4	4

			All Occupations		
	23 Unskilled Labor and Custodial (N=635)	24 All Other and N/A (N=131)	25 Supvr./ Foreman (N=511)	26 Non-Supvr./ Foreman (N=6,015)	27 Total (N=6,526)
5 years or less	55	37	25	49	47
6-10 years	23	29	20	23	23
11-20 years	15	18	33	19	20
More than 20 years	4	13	19	6	7
N/A	4	2	3	3	3

Rehabilitation Workers ranked fourth among all occupations with short tenure, with 59 per cent claiming less than 5 years, although only 22 per cent were under 30, while 35 per cent were recruited before they reached that age.

Among Account Clerks, about the same percentage were under 30 as the Rehabilitation Workers (21 per cent), although a considerably smaller proportion (47 per cent) were short term employees, and a larger proportion (40 per cent) were recruited as youths.

The Engineering and Planning Technicians deviated sharply from the other occupations in which opportunities for young persons seemed greatest. As in these other occupations, over a fifth were young, but unlike the others, the technicians were employees of long tenure, with only 29 per cent having less than six years total service. A higher proportion of technicians (68 per cent) than of any other occupation, were recruited as youths.

With the possible exception of Institutional Workers, 17 per cent of whom were under 30, and 26 per cent who were recruited as youths, these six occupations offered the only real opportunities for young persons. The highest proportion of young people among any of the other occupations was 13 per cent, for the Semi-skilled.

A study of these other occupations indicates that the reason young people are virtually excluded differs according to the type of occupation. For three of the occupations, which together constitute 16 per cent of all respondents, the absence of young people probably can be attributed to the low level of skills needed to perform the job, the menial nature of the job, the depressing environment in which the job is performed, and low wages. Those who lack formal education, or are without occupational skills of some type, and are unable or unwilling to acquire new skills, are most likely to be attracted to or compelled to accept these positions and, in general, these persons are among the older members of our society. We are not suggesting that young persons would be unable to fill these positions, but rather that they would have no desire to do so, nor would they be forced to accept these jobs unless other positions in private business, industry, and government became very scarce.

These three occupations are Laundry Workers, Unskilled Labor and Custodial, and Food Service Workers. The percentage of persons under 30 in these occupations was 3, 8, and 9 per cent of their totals, respectively. These people were old at the time of the survey and they were old when they first began work for their employing government. Only 16 per cent of the Food Service, Unskilled Labor and Custodial, were under 30 when recruited, and an even smaller percentage (11 per cent) of Laundry Workers were young when recruited. The turnover rate among these occupations appears to be quite high, or, at least, their total tenure, is short. Less than half of the labor/custodial group and the food service group had been employed for more than 5 years, and only 51 per cent of the Laundry Workers had worked 6 years or longer.

Thus, in one way, these occupations virtually without youth resembled the occupations in which the proportion of youth employed was relatively high (except for engineering technicians), in that both contained a high percentage of short-term employees.

Another group of 9 occupations seems to offer few potential job opportunities to youth because they require persons with experience or seniority. Like the Laundry, Food Service, and Unskilled Labor and Custodial occupations, the proportion of young people among each of these 9 occupations is very small, but the tenure of employees is very long, and larger proportions of them are recruited as youths.

A comparison of the age when they were recruited, their total length of employment, and their age at the time of the survey suggests that 5 of the 9 occupations tend to be available only to persons who have come up through the ranks, to employees who were recruited when they were relatively young, stayed with the job, or a series of jobs, and eventually were promoted to occupations of greater authority or responsibility. Their occupational classifications would also indicate this to be true, for among the five are included our three types of supervisors -- Foreman/Supervisor of outdoor workers, Institutional Supervisors, and Clerical Supervisors -- plus the Auditor/Accountant occupation, and the Equipment Operators. Clearly, these five jobs were quite different, either in terms of the skills involved or the job environment. Auditor/Accountants ranked first among all occupations in their proportion of high school graduates, while Equipment Operators ranked last, right behind our Laundry, Food Service, and Unskilled Labor and Custodial occupations. Even though the occupations differ, so far as youth are concerned, they are generally excluded from them for the same reason -- these jobs tend to be filled by promotion, by people with seniority.

The other four occupations filled with older workers, and with employees with relatively long tenure include Skilled Craftsmen, Pump, Engine, and Boiler Operators, Semi-Skilled outdoor workers, and Administrative Assistants. These jobs differ from the five described above only in that seniority seems less important as a prerequisite to qualify for them. Either tenure is shorter, or the proportion recruited as youths is lower, or both, which suggests that although these occupations are generally filled only by older persons, proportionately more of these persons are recruited from outside of the service, rather than promoted from within.

The final group of four occupations includes Inspection/ Examination employees, Storekeepers, Laboratory Technicians, and Assessor/Appraisers. This group of occupations, comprising about 7 per cent of all respondents, stands somewhere in between the 9 occupations which are filled with few young people because experience and/or seniority is an employment prerequisite, and the three occupations from which young people apparently exclude themselves because of the menial nature of the jobs performed.

These four occupations differ from the seniority/experience occupations in that their members have much shorter tenure (46 per cent of the Storekeepers have been employed 5 years or less, and 43 per cent of those in each of the other three occupations), although the proportion under 30 was as low or lower, and the proportion recruited under 30 was as high or higher, as it was among the seniority/experience occupations.

They differ from the "menial" occupations in that they were recruited at a younger age but have longer tenure.

A large proportion of young persons are excluded from these occupations, not so much because long tenure with the employer (i.e., seniority) seems to be a prerequisite, but probably because of the tendency to hire the older, experienced employee, from outside of the service, who then stays with the job -- rather than shifting to another occupational category -- thus reducing the number of positions that become vacant, and therefore the number of positions available to the young.

Potentially, all of the sub-professional occupations of the respondents could be performed by young persons. Potentially, every job demanded certain skills, duties, or responsibilities which a person had to acquire before he would be qualified and hired for the job. A college degree was not required in order to be qualified for employment in any of the occupations filled by the respondents, and local vocational schools could, therefore, potentially provide all of the pre-service training necessary to qualify young persons for any of the jobs covered by the survey.

But if we consider here only the data derived from the questionnaires, it is apparent that although any government job not requiring college graduation as a pre-condition of employment is, potentially, a job that could be filled by a young person recruited from the local vocational school, the actual demands, or needs, or opportunities for such young persons are much smaller than the potential.

Close examination of the occupations among the sub-professional work force of the state agencies and local governments included in this survey reveals that all of them may be open to non-graduates, but this does not necessarily mean that all positions are open to recruits, that is, to persons from outside of the service, or if open to recruits, that persons fresh out of school, with no employment experience, are considered eligible for the job. In other words, some of these sub-professional occupations are virtually closed to persons without prior employment experience, either with the employing government, or elsewhere.

Aside from those positions filled almost exclusively by promotion or by other experienced personnel, all of the remaining occupations may be open to non-graduates, and inexperienced recruits, but this does not necessarily mean they are open to young persons, or that they require persons who have completed any type of extended pre-service training at the vocational school.

The two types of occupations which are open to inexperienced recruits but closed to the young or irrelevant to the vocational school are not the same although they are similar in that a high degree of formal schooling is not required. Just as there is an upper limit which excludes vocationally-trained youth from some types of public employment (which we have defined as the requirement of a four-year college or university degree), so too, does there appear to be a lower limit, a number of occupations that demand almost no formal education. Some young persons are employed in these occupations, such as Laundry, and Food Service Workers, or Unskilled Labor, janitors, and maids, but we suspect their employment is transitory, that their tenure will be quite short.

Thus, the potential market for youth trained in the local vocational school does not extend to all sub-professional occupations included in the government work force, but is restricted to relatively few of the hundreds of occupations employed. This is partly due to the nature of the occupations involved, but the potential is also considerably deflated by the attitudes and demands of government employers and government employees.

The completion of a certain level of formal education, or the ability to perform certain tasks at a certain level (which could be acquired through formal schooling), are only two of several characteristics that a person must possess before government employers will consider him qualified for many of the sub-professional positions. These additional qualities considered desirable and frequently demanded by government employers, which might include personal characteristics such as "maturity," or, more commonly, work experience, often are part of the official specifications for the job, and effectively serve to exclude young persons, or those without employment experience, from many, if not most, of the sub-professional occupations, even though the young or inexperienced may have been thoroughly trained for the position, either in a vocational school or some other educational institution.

These additional characteristics, officially required if one is to be "officially" considered eligible for a job; the attitudes of government employers (which we found generally to favor the older, or experienced person, over the younger, or inexperienced, regardless of the amount of formal education); official seniority rules among unionized (mainly blue-collar) government workers; and the natural desire for promotion -- or at least for increased income -- among those already employed by government, plus their "inside track" advantage over potential recruits, all serve to impose severe limitations on the actual number of sub-professional positions that are available to young, vocationally-trained recruits.

Responses to the employee questionnaire, a copy of which may be found in the appendix, were revealing, but our experience in the offices and agencies of state and local governments, and local vocational schools, was equally or more illuminating. They help explain the questionnaire responses, as well as the dimensions of the information problem in regard to the sub-professional manpower requirements of state and local governments.

Discussion

The questionnaire results were a disappointment. They confirmed our original assumption that state and local governments were not using the vocational schools as a source of trained, young recruits. But that was expected. What was unexpected was the fact that so few young persons, regardless of their educational background, were employed by these governments. Furthermore, the results do not tend to confirm our assumption that a significant proportion of subprofessional jobs require considerable pre-service training. It is true that the size of the government work force has been steadily climbing, but the number of Licensed Practical Nurses, Chefs, Seamstresses, and Therapists, is far overshadowed by the number of Institutional Aides, Laundry Workers, Kitchen Helpers, and Prison Guards. There are Draftsmen, Plumbers, Electricians, Stenographers and Accountants, but they are greatly outnumbered by the Semi-skilled, and Unskilled, by those performing fairly routine jobs, by the truck driver, the switchboard or duplicating-machine operator, the janitor and the mower operator. Finally, positions that do require considerable pre-service training either require a college degree, and are therefore excluded from the sub-professional work forces, or tend to be filled by promotion from within, or by experienced, older workers recruited from jobs outside of the service.

Of course, it could be true that the demand for trained young persons far exceeds the supply, that the demand for highly-trained sub-professionals in general, far exceeds the supply, and that many positions which would offer potential employment opportunities for vocationally-trained recruits are simply not being filled, i.e., are vacant, and obviously, without respondents these positions would not be reported by the questionnaire survey. Or, the high proportion of older workers could be the result of a shortage of trained youngsters, and not the result of personnel policies, recruitment procedures, or the nature of the jobs involved.

The questionnaire information only partially helps us answer these questions, and we must turn to the government employer himself to clarify the picture. The results of our experience in the field, with the employers, and the vocational schools, help explain why the questionnaire results were a disappointment.

Our research design called for the collection of the class specifications used by each of the 23 jurisdictions (the state, and the 11 counties, and 11 county-seat cities). We assumed that these specifications would tell us which positions, or classes of positions, could be filled by persons without a college degree. That is, we assumed that each jurisdiction had established certain educational and other qualifications for each type of occupation in its work force. Those occupations for which a college degree was required by the jurisdiction would be excluded. Each of the remaining occupations would be considered part of the sub-professional work force, and potentially open to vocationally-trained youth.

After determining, from the specifications, the titles of each occupation ("Typist I," "Institutional Aide," "Grader Operator," etc.), we would then examine the jurisdictions' budgets and personnel records to determine the number of full-time employees in each occupation. This would tell us the size of the work force and also identify those employees to whom the questionnaire would be distributed. The budgets and personnel records for past years also would help us determine how many persons, in what types of occupations, were recruited annually, or how many positions were vacant, and thus allow us to estimate for the vocational school the potential demand over time for vocationally-trained recruits, and the type of training they would need (i.e., the type of occupation for which they would be hired).

We had anticipated some difficulties in a few jurisdictions, where class specifications and other personnel records might be unavailable, and in those cases, interviews with the employing authorities might be required to determine the qualifications established for the various occupations, the number of persons needed, and so forth.

Our major premise was that a communications problem did exist between the employers and the schools, and that at least part of the problem was caused by a lack of information about the needs of government. But we grossly underestimated the seriousness of the information problem. We did not foresee the possiblity that, for most jurisdictions, the employer himself did not know, or knew only vaguely, what his employment needs were; or he felt that those needs were being adequately met--that he had no serious recruitment problem--or he was either resigned to the proposition that well-trained youth could not be attracted to government jobs, or he was biased against them.

The first jurisdiction we visited was a city not included in the survey itself, but used to pre-test the questionnaire. Even with the full cooperation of the chief executive, his department heads, and employees, we received a foretaste of the difficulties we were to encounter in the collection of information in the jurisdictions to be surveyed. Class specifications for positions in this city were outdated, in need of revision, and consequently, largely ignored. To determine which occupations did not require a college degree we would have to consult with the department heads themselves, who did the hiring. Consultation with the department heads also was required in order to separate the full-, from the part-time employees holding sub-professional occupations, and to administer the questionnaire to these employees. We also learned it would be impossible to get the questionnaires completed and returned within a uniform time period since some employees were on leave, worked different shifts, or, if we were to distribute the questionnaire through the payroll, were paid at different times. We also discovered that some city agencies or institutions had their own sets of class specifications, did their own recruiting, had a separate budget and, although their employees were paid out of city funds, and considered to be employees of the city, the agency or institution for which they worked enjoyed a considerable degree of autonomy, almost to the extent that it could be called a separate jurisdiction. Finally, records on personnel transactions were not kept, in usable form, and no one was specifically charged with the sole responsibility of personnel administration for the city.

It became apparent that either a considerable period of time would have to be spent waiting for the return of the questionnaires, or a return trip or several return trips would have to be made to the jurisdiction by the Madison-based staff, particularly if we were to receive as complete returns as possible. We decided to rely on trained employees of the Wisconsin Survey Research Laboratory, who resided in the areas surveyed, to follow-up on the questionnaire-return phase of the survey. With 11 areas to survey, with several state agencies, offices, and institutions located in different places in each area, and with the possibility that, as in our pre-test jurisdiction, centralized distribution and return of the questionnaires would not be possible for some city or county governments, and several call-backs would be required to assure complete returns, the travel expense of the Madison-based staff would be prohibitive.

We were hopeful that our difficulties in acquiring reliable personnel information in the pre-test city would not be encountered in the survey jurisdictions, and were particularly optimistic that the state government, with its long-established merit system, uniform classification plan, and centralized personnel bureau which also provided salary and classification surveys for some cities and counties, would present no great information-gathering problems, but be of great assistance to us.

Unfortunately, the central personnel agency of the state provided almost no help; not because its employees were unwilling to cooperate--they gave us what information they had--but because, as in our pre-test city, the information we needed on the number and types of positions and vacancies by geographic area, or even by state department or institution, simply had not been accumulated by the agency. Records of personnel transactions were kept, but only in the individual employee's folder. A biennial report of the agency made the year before our survey said that it had "purposely avoided" including a "myriad of statistics," in the report, but it would have been more candid to report that it did not have very much useful information on tenure, turnover, vacancies, either by class, by area, or by state agency or institution.

The state personnel agency was understaffed, under-mechanized, and was virtually powerless to compel the agencies of the state to report personnel transactions, except those relating to the enforcement of merit system rules and regulations.

In the months between the time we sought information from the state agency, and the present, considerable progress has been made in the centralization of personnel information, but at the time of the survey, the absence of information in the hands of the agency, forced us, as in the pre-test city, to consult individually with each state department and agency to obtain basic data on the personnel it employed in the survey areas. It was little wonder that area offices and institutions may not have been communicating their needs to the vocational school, since they were not even communicating with each other.

We received complete cooperation from the Madison offices. Each department or agency we contacted not only provided us with a roster of their personnel, by occupation, employed in each of the 11 areas, but also a letter to their office or institutional heads in the field urging them to cooperate with the survey. Unfortunately, however, although the Madison offices could provide us with the name, title, and location of their personnel, few agencies kept any useful records on tenure, turnover, additions, appointments, or vacancies by position.

In short, neither the state personnel agency, nor the individual departments or agencies of state government, could provide trend data on manpower needs. Only the very largest had made any effort to accumulate data, identify current needs, and plan for future needs. Thus, although we could acquire lists of current positions, which we used in conjunction with the classification specifications to determine who, and where, the sub-professionals were for purposes of the questionnaire survey, reliable trend data on the state's personnel needs in a given geographical area was unobtainable.

Analysis of the available personnel data on state employees convinced us that even if there were no information deficiencies, one of our original assumptions in undertaking the project was erroneous. We had hoped that by including a number of areas with work forces of different sizes, and by including only areas with a substantial number of city, county and state employees, our findings could be generalized to other areas in the state with work forces of similar size, or, by reducing the data and inferences, to areas with smaller work forces and to areas in other states, even though the division of labor between state, city, and county government in those other states might be different than it was in Wisconsin.

After examining the data on state employees, by area, it seemed apparent that any attempt to generalize the manpower needs of state and local governments from the surveyed areas, to other areas, could easily result in gross miscalculations. Even though a substantial number of state employees were working in each area, the composition of the state work force differed radically from one area to another, depending on the type of state agencies and institutions located in the area, the size of the institutional population, and apparently the personnel policies of the institution or agency.

Table 13 shows the radical differences in the number of personnel employed in the same occupations, by different state institutions. Note that other than Account Clerks and Boiler Operators there were few similarities in the number of employees in each occupation, and that the variations do not seem to be significantly related to the size of the institutional population.

Even among state institutions performing essentially the same function, as is shown in Table 14, there is a tremendous variety between institutions in the number of persons employed in similar, standard class titles, and these variations bear little relationship to the size of the institutional or area population or, since they are functionally similar, to the type of clientele served.

The total number of positions, and the change in that number over time, also varies considerably from one state institution to another, and hence, one area to another. Table 15 indicates that one institution had added 100 positions between 1962 and 1965, at the same time that its institutional population declined by about 100. Another institution added less than 30 positions during a period while its population declined by almost 200. In still another institution, the institutional population and the number of employees had remained about same throughout the four-year period.

TABLE 13

NUMBER OF PERSONNEL EMPLOYED IN SELECTED SUB-PROFESSIONAL OCCUPATIONS: BY SELECTED WISCONSIN STATE DEPARTMENT OF PUBLIC WELFARE INSTITUTIONS, 1966

	Mental Institutions		Correctional Institutions		
Standard Class Titles	Southern Colony	State Hospital	State Reformatory	School for Boys	Home for Women
Account Clerk	1	3	1	1	1
Baker	2	2	1	1	-
Barber	2	1	-	1	-
Beauty Operator	1	3	-	-	-
Boiler Operator	5	5	3	5	5
Chef	4	3	3	4	-
Cook	21	11	-	-	-
Dental Hygienist	1	-	-	1	-
Gardener	2	2	1	1	-
Lab. Technician	1	-	-	-	-
Maint. Craftsman	14	13	6	8	-
Maint. Mechanic	5	7	1	-	1
Meat Cutter	2	1	1	1	-
Operating Engineer	8	6	10	3	1
Practical Nurse	5	13	-	-	-
Seamstress	2	3	-	2	-
Stenographer	6	19	3	10	1
Telephone Oper.	-	5	-	-	-
Therapy Asst.	18	9	1	-	-
Typist	19	15	11	5	4
Population:					
County (000)	142	108	125	158	75
County Seat (000)	89	45	63	30	33
Institutional (00)	14	7	8	3	2

TABLE 14

NUMBER OF PERSONNEL EMPLOYED IN SELECTED CLERICAL OCCUPATIONS: BY SELECTED WISCONSIN STATE UNIVERSITIES, 1966

Standard Class Titles	State Universities				
	Oshkosh	Stevens Point	Eau Claire	La Crosse	Superior
Clerk I	2	-	-	-	-
Clerk II	4	-	-	-	-
Clerk III	1	1	1	-	1
Steno. I	22	1	9	11	9
Steno. II	13	17	17	24	5
Steno. III	-	4	3	-	2
Typist I	-	6	4	-	8
Typist II	21	14	8	6	6
Typist III	2	2	-	-	-
Population:					
County (000)	108	37	58	72	45
County Seat (000)	45	18	38	48	34
Enrollment (00)	71	45	45	39	23

TABLE 15

NUMBER OF INSTITUTIONAL EMPLOYEES COMPARED TO INSTITUTIONAL POPULATION: BY SELECTED WISCONSIN STATE DEPARTMENT OF PUBLIC WELFARE INSTITUTIONS, 1962-65

YEAR	Southern Colony		Winnebago State Hospital		Reformatory		School for Boys		Home for Women	
	Positions	Population	Positions	Population	Positions	Population	Positions	Population	Positions	Population
1962	679	1521	634	812	248	948	161	296	99	166
1963	683	1499	645	705	257	850	167	301	101	164
1964	750	1494	705	662	272	781	184	315	115	177
1965	778	1417	710	690	272	769	189	331	116	158

Finally, Table 16 presents figures showing the total number of filled positions, appointments, and separations, annually, and again points up the great differences between institutions, and the annual variations for the same institution.

Thus, selecting areas with a large number of state employees may have assured that a representative sample of the various types of positions was included in the 11-area survey, and therefore produced a reasonably good overall picture of the characteristics of the state and local sub-professional, but because the state agencies differed so radically from place to place, generalizing from one area to another, even within the state, would be quite hazardous.

In addition to the personnel data obtained from the agencies, we also acquired a set of the state's class specifications, including the titles of the various jobs, description of the duties and responsibilities of the job, and the qualifications required to be eligible for the job. These were used, as intended, to separate the professionals from the sub-professionals, but they also were revealing and perhaps partially help explain the large number of older respondents in our survey.

The qualifications for many of the jobs seemed to be set unreasonably high, and for others, the qualifications, especially those relating to education, seemed to be unreasonably vague. Frequently it was difficult if not impossible to ascertain from the specifications whether a particular job was or was not open to someone without a college degree. Sometimes a "minimum" level of training and experience was specified; for other titles, a "desirable" level of training and experience. Sometimes, in addition to training and experience qualifications, other "Knowledges, Skills and Abilities," were "Required," or "Essential," or merely stated. Sometimes, "Graduation from a college or university," was specified, and for other jobs the specification was "Such training as may have been gained through graduation from a college or university."

In addition to the class specifications, and the many individual announcements of job vacancies distributed by the state, the central personnel agency also circulated a summary announcement of the various job opportunities in the state civil service. The summary announcement current at the time of the survey listed the title, salary, and qualifications for approximately 200 different job titles. The purpose of the announcement was to attract applicants, but a young person without work experience who read the announcement would probably conclude there was little opportunity for him in the state service.

Whole classes of some related occupations were to be "filled

TABLE 16

INSTITUTIONAL DIFFERENCES IN ANNUAL TOTAL EMPLOYMENT, APPOINTMENTS, AND SEPARATIONS: BY SELECTED WISCONSIN STATE DEPARTMENT OF PUBLIC WELFARE INSTITUTIONS, 1962-65

Employing	Number of Filled Positions				Number of Appointments				Number of Separations			
Institution	1962	1963	1964	1965	1962	1963	1964	1965	1962	1963	1964	1965
Southern Colony	679	683	750	778	187	173	113	170	190	146	135	184
Winnebago State Hospital	634	645	705	710	120	117	129	120	112	99	110	124
Reformatory	248	257	272	272	31	45	42	32	15	24	25	32
School for Boys	161	167	184	189	43	47	37	38	40	41	29	30
Home for Women	99	101	115	116	55	43	29	17	32	31	15	14

by persons with mature judgment and a good work record," while others were described as being available to "mature, friendly men and women who have a good record in health and in stable employment."

Young persons without employment experience who read the specifications carefully would discover that of some 197 non-professional jobs described in the announcement, 13 were for trainees, 4 types were seasonal employment, and one title could be filled only by promotion. Of the remaining 179 titles, only 21 did not require experience to be qualified for the job; 36 permitted training to be substituted for experience, and most of these specified college training; and 122 specified that experience, from "some," up to 6 years, was a prerequisite.

The state, at least, did have class specifications which were used in the administration of its personnel system. Even if they were sometimes vague, and at other times they seemed too demanding, they were an important part of the state's overall effort to maintain a rational system of personnel administration. For most of the other governments in our survey, if class specifications existed, and were used, they were used primarily for salary purposes. They were scarcely more than a set of titles, tied to a salary schedule, and manipulated by city and county legislative bodies to fit the specific wage or salary problems of individual employees. Class specifications, in virtually every local jurisdiction surveyed, either were non-existent or were used not to administer personnel, but to administer salaries and wages.

In fact, it would be erroneous to say that most local jurisdiction had any centralized system of personnel administration. Typically, the first concern of local government employers was the salary assigned to the specific job title, rather than a concern with the official duties and responsibilities or qualifications assigned by the classification specifications.

We discovered this the hard way, through unstructured interviews with city and county department heads and, in the two or three local jurisdictions which had one, with the personnel officer, or director.

Our original plan was to obtain class specifications for many of the local jurisdictions from the local services office of the state's central personnel agency. Over the years, many of our survey jurisdictions had employed this office to prepare classification plans for them, and copies of the local jurisdictions' class specifications were kept on file in the state office. Every effort was made to obtain these specifications and other survey information, gathered by the office, which reported the number of personnel employed in various classes. We were consistently refused access to these data, on the grounds that they were really the property of the local jurisdiction which had commissioned the office to make the surveys, and therefore confidential. If we wanted the data we would have to obtain it from the local jurisdiction. It was not until after we had completed our own survey that we concluded the office was unwilling to release the data because it was virtually worthless. The surveys they had made, the specifications they had prepared, the manning tables, the salary schedules, etc., were not an accurate reflection of the local jurisdictions' personnel configurations. The work of the office was often incomplete, filed and forgotten by the local jurisdiction, revised by the local jurisdiction, not used, or misused.

The state, to our chagrin, turned out to be a much bigger problem than we had anticipated, but at least, after considerable effort, we were able to obtain the number of sub-professionals, by occupation, employed in the survey areas.

In reporting the results of our efforts to obtain information about the sub-professional manpower needs of state and local governments it is important to remember that the problems we encountered also would befall any educational institution, curriculum planner, vocational counselor, or job placement officer.

After our unnerving experience in the pre-test city, and with the state, appointments were scheduled with state office and institutional managers, and the chief executives of city and county governments in the survey areas.

Our first inkling of the major problem we would encounter in the field was deciding who, in county government, had the authority to give us permission to study its personnel system. The counties had no chief executive. Nor did they have personnel agencies, officers, or directors. The only body in county government which had anything like overall responsibility for the personnel function was the elected, part-time county board and its various committees, but they appeared to be concerned primarily with salary and wage problems rather than the administration of the county's personnel system. The closest thing the counties had to a chief executive or administrator was the county clerk, an official elected on a partisan ballot, and in some counties the chairman of the county board, elected by the members of the board, seemed to have assumed some executive strength.

Our initial interviews, some with county clerks and others with board chairmen, quickly showed us that no single agency or authority, such as the state's central personnel agency, had responsibility for administering the counties' personnel system, that is, responsibility for maintaining personnel records, position control, classification, recruitment, placement, and so forth. The county board or its personnel committee, to the extent that it did become involved in personnel matters, typically was not concerned with administering a personnel system for the county, but with deciding questions involving individual employees, or wages and salaries.

The typical county may have appeared to be a single governmental entity, but in fact it was a collection of fairly discrete, semi-autonomous institutions, offices and agencies, (some headed by independently-elected officials), loosely tied together through a network of departmental committees, commissions, or boards composed of members of, or appointed by, the county board, which, through additional committees and the board as a whole, served as an umbrella--or perhaps "blanket" is a better word--covering all of the separate pieces, and providing whatever identity the county, as a single organizational entity, may have had.

Class specifications proved to be of little value in deciding which county jobs would be available to applicants without a college degree. Most were either outdated, ignored, used only as extremely general guidelines in establishing qualifications, and seldom if ever covered all of the occupations currently being performed by county employees.

Current and past county budgets helped somewhat in determining how many persons were authorized and employed, for whom, and in what types of jobs, but typically, again, they were incomplete, frequently erroneous, and misleading.

Trying to obtain a roster of the number of full-time employees, their occupations, and the agencies for which they worked, in order to distribute the questionnaire, was a herculean task in virtually every county. Our suggestion that such a roster might be available was greeted either with bemused tolerance by county officials and employees or we were handed rosters which were of little use. We were dealing not with one personnel system but with several; not with one set of qualifications for employees, recruitment policies and practices, but with many.

Frequently in a county, separate budgets, payrolls, classes of employees, rosters, and rules existed for employees in the Highway Department, the County Institutions, the Welfare Department, and offices headed by elected officials.

This meant, again, that each agency or institution had to be visited separately, and in most cases, even the agency or institution itself did not possess information in readily-usable form, and it had to be developed from pay-roll records, timesheets, or other original sources.

Documents which might indicate the job titles of employees working for the county (for example, salary schedules) frequently would not include the number of positions authorized or filled for each title or occupation. Documents listing the names of employees working for the county, or one of its agencies or institutions, (for example, timesheets, or pay-rolls) frequently would not list their titles. Documents giving information on both the number and types of positions did not indicate whether the positions were merely authorized, filled, or vacant. Documents listing the names and titles of all persons employed over a period of time by the county would not indicate whether they were full, or part-time, seasonal, or whether two or more persons had filled the same authorized position within the time period covered by the document. Obviously, since there is a turnover in personnel, the total number of persons employed annually or quarterly is not the same as the total number of positions. Documents listing the names, titles, employing agencies, and salaries of each currently employed person would exclude vacant positions, employees receiving hourly wages (as opposed to the salaried), or be incomplete (that is, not include all of the personnel employed by all of the county agencies or institutions).

What originally had seemed like a fairly simple, routine task--determining how many positions, filled and vacant, there were for each type of sub-professional occupation employed by the county--turned out to be an exceedingly difficult, time-consuming undertaking. A vocational school attempting to determine current and future manpower needs of the county government in its immediate geographic area has a bigger problem than finding a needle in a haystack, and that problem is finding the haystack itself. Position classification and control, manning tables, personnel transaction records, job audits, performance evaluations, eligibility standards, manpower planning, all were unknown to the typical county in which even an organization chart of the county government did not exist.

It is less easy to speak of the "typical" city government, but generally the personnel information problem was as great, or greater in several cities, as it was in the counties. Cities ranged from one which might be discribed as having a "model" system of personnel administration--with a full-time personnel officer, well-established recruiting practices, an up-to-date classification plan (which was actually used), standardized policies of examination, screening, placement, and so forth--to one whose policy was never to tell employees what their job titles were. (That way, so we were informed, employees could be paid whatever management thought they were worth, and could be assigned whatever work management needed done, and could not complain that others with the same job were being paid more, or that the duties assigned were not part of their job. It also made it more difficult for employees to organize, become unionized, and bargain collectively.)

The degree, and location of control and responsibility over personnel matters, including the establishment of educational requirements for entry into certain positions, also varied tremendously from city to city. In some cities the council stayed out of personnel matters and the personnel system, to the extent one existed, was managed by other elected, or appointed, officials. In others, the council or one or more of its committees retained almost complete control over personnel, not only established salaries, set educational standards, controlled positions, but even interviewed each job applicant.

The centralization of the personnel function in cities ranged from one whose mayor thought he had complete control over all personnel questions (further investigation proved he did not), to one whose mayor frankly admitted that the only one he was in charge of was the city clerk--and he was afraid of her--to still another whose city manager was in absolute control of the system. The system, however, rarely extended to all city agencies. All of the cities presented the same problem of agency de-centralization that was found in the counties. Just as considerable effort was expended simply in determining which agencies and employees actually were a part of county government, so too were some city employees almost totally removed from the control of the council, manager, or mayor, because they worked for city agencies which enjoyed a considerable, if not total, degree of autonomy. They were employed under what amounted to separate personnel systems, with separate sets of job titles, and separate recruitment policies and practices.

We knew in advance of the survey that this was true for personnel employed by the police, fire, and educational agencies, but failed to realize how far removed from centralized control by the council and chief executive, were so many positions, or so many agencies, usually including: libraries; welfare agencies; utilities, providing water, parking, and electricity; agencies employing hourly wage personnel; and agencies headed by elected city officials.

City budgets were of some help, and in two or three cities personnel rosters were fairly complete and informative, but these were the exceptional places. As a rule, just as in the counties, we found we were not dealing with a personnel system, or a single organizational entity, the city government, but with several separate systems, separate organizations. One city, for example, had ten separate payrolls, five versions of fringe benefits in one payroll, and bargained with six different unions, separately.

Needless to say, many separate interviews were required to determine the real manpower needs and recruitment policies of these cities. If one were to consider only those positions under the direct control of the mayor, manager or council, then the number of city employees was, indeed, quite small.

For example, on the basis of personnel rosters and budgets, we calculated the total number of full-time clerical personnel, that is, secretaries, stenographers, clerks, typists, and office machine operators, whose positions were under the direct, centralized control of the council and chief executive in seven cities ranging in size from 30 to 90 thousand population. In two cities over 50,000, the number of such employees was 33 and 36; in two cities of approximately 45,000, the number was 20 and 30; in three cities between 30 and 38 thousand in population, the number of clerical employees was 16, 13, and 13.

While many more clerical workers in each of these cities were paid out of city funds, or a combination of city, state and federal funds, and would have to be counted as employees of the city, the agency heads for which they worked, or a board or commission controlling those agency heads, had substantially more control over the personnel function than did the city councils or the chief executives.

Besides the separate and semi-autonomous personnel systems in the cities and counties, with each agency or institutional head setting his own employment standards and doing his own recruiting in most (not all) cities and counties, another problem complicating an accurate count of the total manpower and training needs of local governments, and to a lesser extent, of the state government, was the very large number of positions employed by these governments on a part-time basis. Much of the work performed by highway, public works, parks and recreation, conservation, and other "outdoor" personnel is performed by seasonal employees. The work flow of other governmental agencies peaks at certain periods (for example, during elections, when taxes are collected, etc.), and ebbs at other times. For these and other reasons, many employees work full-time, part-time; others work part-time all of the time; some work full-time, but part-time in one occupation and part-time in another. As noted above, the size of this temporary, part-time, split-appointment, seasonal work force is extremely large, and does much of the work of government.

Another complication in estimating current manpower needs, and one which reinforces a conclusion reached earlier in this section, namely, that inter-area generalizations will have little validity, also raises grave doubts about predicting future needs on the basis of past experience. While the total expenditures of a government and its expenditures by function may be a rough reflection of the level of services provided, neither the total amount spent nor the amount spent for personal services is a very good measure of the manpower being utilized to perform the functions of government. Policy-makers may decide to assume, or expand, services provided by their jurisdiction, but to contract with private employers to perform the actual work. The extent to which government relies on its own employees or on private jobbers or even on other governments to supply services to its population varies greatly from one area to the next. A public airport within a county-area may be owned and operated by a city, but not the county-seat city; or it may be owned by the county, but leased to a private operator, who hires his own employees, under his own specifications, although ultimately their salaries may be paid, indirectly, by the county. Similarly, radical changes--either increases or decreases--in the manpower needs of government in an area can occur when new services are undertaken, shifted from public to private employees, or suspended.

Even ignoring, or solving these problems of the public-private mix of employees doing the work of state and local governments, the problem of varying service levels, and the problem of part-time public employment, one comes back to the biggest problem of all--the attitudes or policies of government employers, and the fact that in order to ascertain what those policies were for 23 separate jurdictions, many more than 23 personnel agencies had to be contacted.

Disregarding the state, whose policies were fairly uniform, rigid, and seemed to lean heavily in favor of the older, or highly-experienced, or highly-educated applicant, we were forced to visit literally dozens of agencies and institutions to obtain an accurate survey of the size and composition of the sub-professional work force and to determine the policies of the city and county government in a single county-area.

The author personally spoke to more than 100 employers of local government personnel, including chief executives, personnel officers, clerks, comptrollers, departmental and institutional heads. The numbers and types of employers we had conversations with in each area depended upon how centralized and standardized were the recruiting policies and practices of the survey jurisdictions. In addition, many informal conversations were held with employees who helped supply us with the personnel records and budgetary documents that we required. Any attempt at a summary description of the recruiting practices, attitudes, and beliefs of local government employers will be somewhat distorted, since there were nearly as many variations as there were employers.

Practices varied the most among the city governments, and the differences between cities seemed to be unrelated or only slightly related to population or form of government (that is, mayor-council, or manager-council forms, both of which were included among our cities). In one manager city, recruitment was a highly-formalized process. Both the local vocational school and the local office of the state employment service had copies of the city's job specifications, which were adhered to in establishing the qualifications for job eligibility. When vacancies occurred or were impending, a standard form was sent both to the school and the employment service. Announcements of the job opportunity were made by the city (which, incidently, did have a single person responsible for personnel), and advertisements were usually run in the local newspaper. Much of the recruitment function had, in fact, been turned over to the school and the employment service, which administered examinations, screened, and interviewed prospective employees for the city before certifying them as eligible. City employees were union members and relationships with the union were cordial. There was a strong belief in pre-service and in-service training of employees, and many positions were filled by promotion from within the city service. The labor market in this area was, incidently, "extremely tight," and the city was "scraping the bottom of the barrel" for qualified employees. Qualified applicants, regardless of age, were sought.

In another manager city, the system was highly informal. No written qualifications for the jobs had been established and, indeed, job titles and classification descriptions did not exist. Some employees were unionized but the union was weak. Recruitment was informal and the older, experienced worker was considered the most desirable recruit: "we will hire people who are 50 or older, if they are experienced, before we will hire highly-educated youths who haven't worked." Typically, new employees were "pirated" from other employers, both public and private. They could steal the best (i.e., most experienced), employees from the county and other local governments because they offered higher salaries, more fringe benefits, etc. The labor force in the area, in contrast to the city described above, was "plentiful, skilled, and hard-working," and there were more applicants than there were jobs.

These brief comparisons of two cities help point out the danger of generalizing about the local employer, but although there were variations on a theme, or several themes, it is possible to discuss the policies and attitudes of most, if not all, local government employers.

The overriding theme can be stated in one word--stability. The local government employer wanted a work force that, above all else, did not change, had a low turnover rate. If quality had to be sacrificed for stability, then it would be, which meant that the older, less highly-educated, less mobile worker was sought over the highly-trained and less stable youngster who was more likely to leave for another job when the opportunity occurred, to get married, pregnant, or dissatisfied with the job. Time and time again employers told us they were looking for experience and the promise of stability; above all, they wanted to avoid turnover, and the problems of recruiting new workers.

Consequently--since most employers ignored what official qualifications may have been specified in the class specifications and set their own qualifications--age, and experience were paramount.

Most employers also believed that they had no recruitment problem. Their labor force was small, there were almost no vacancies, there were more applicants than there were jobs, a high level of education was not necessary for most of their jobs, and if skills were required they could be learned on the job, or so we were told. Several employers told us that--outside of the police and fire functions--the total number of sub-professional jobs was, or had been, declining, rather than growing.

Most mentioned one or two types of jobs that were difficult to fill, usually engineering-related, skilled craftsmen, persons who know something about governmental accounting and budgeting, diesel mechanics, machinists, and some of the more hazardous positions such as tree-trimmers, or jobs considered "degrading," especially by youngsters, such as orderly or aide positions in mental institutions.

But it was rare to hear employers complain about shortages of manpower, and if there were positions that could not be filled, well, then the job just didn't get done, would be done by part-time help, or would be turned over to private contractors. If a qualified plumbing inspector could not be found there would be fewer inspections this year; two practical nurses could fill one position--each half time; if machinery broke down it could be sent back to the manufacturer for repair, or he could send someone out to repair it.

Furthermore, few employers seemed to have a highly-developed notion of what ought to be accomplished, of how productive their employees in various occupations should have been, or of how much work the agency as a whole should have been accomplishing. Little evidence was found of attempts to measure or evaluate performance, of planning to accomplish certain goals, and progress reports were as rare as organization charts and personnel transaction records.

Even those employers who were not biased in favor of the older, experienced, more stable recruit, had a fatalistic attitude toward the employment of qualified young persons. If there were weaknesses in their labor force they generally were blamed on a miserly city council or county board which authorized compensation below the level that was competitive with private business, industry, or even the State of Wisconsin. As one employer put it: "All the good young people are snapped-up by business, anyway." Or, "if we get them young and untrained, and train them on the job, as soon as they get good enough they leave for higher-paying jobs." And, as one mayor put it, "why shouldn't we train them for industry?, after all, they pay the taxes."

Besides blaming low wages, the inability to attract and retain qualified young persons was attributed to the fact that relatively few positions requiring education or training were open to them. Unionism, especially among blue-collar positions, was stated as the major reason. The better blue-collar jobs were obtained only through seniority, in most places, either because of union rules or the employer's belief that the job could only be learned by "working your way up." Thus, in one city, "just about the only substantial number of new people we hire in a year are Labor I." And in a larger city: "if someone wants a job here in a blue-collar job he starts by hauling ashes." And a highway commissioner with a labor force of approximately 100 employees: "I've never hired anyone for any job except common labor." Although neither the union, nor seniority, count as much among the white-collar local employee, the fact that he is employed by government and learns of impending vacancies that pay more than the job he currently holds, before outsiders learn of job opportunities, means he has a better chance at the job than a youngster who might be in the job market. The informality of most local recruiting assures that something less than an "open" job market exists, and while we found no real evidence of patronage in the usual sense of the word, employers left no doubt in our minds that "pressures" were felt from incumbent employees, the council or board, and the public itself, to get friends, neighbors, and relatives a place on the local government payroll.

The information provided by the questionnaire, and our experiences in obtaining these and other data, lead to certain conclusions about the nature of state and local employment; the manpower needs of state and local governments; and the relationship of those governments to the local vocational school, but to complete this discussion of our experience in the field, the vocational schools themselves and particularly their relationship to state and local governments as employers, and their attitudes, perceptions, and beliefs about government as an employer--as expressed through their directors--must be summarized.

Just as we set out to obtain an overview of the state and local government sub-professional, government's demand for him, and how he was obtained by government, so too did we attempt to discover how well government's demands were being met or could have been met by the local vocational schools.

In several ways, our experience in surveying the schools paralleled our experience with state and local employers and convinced us that the overview of the government employee as expressed through the employee questionnaire was more accurate than inaccurate, a conviction that was reinforced, as the foregoing discussion has implied, by our attempt to gather accurate information about the governmental work force and our experience with government employers.

The local vocational schools were a part of the state-wide system of vocational, technical and adult education, just as the sub-professional employee of state government was a part of the state-wide classified service, and the sub-professional employee of city or county government was a part of the labor force which was employed by cities or counties. The local vocational school, like the state and local employee and his employer, was not part of a highly-centralized, uniform system of control, but enjoyed a substantial degree of autonomy. The relationship of the local school to the State Board of Vocational, Technical and Adult Education was not unlike the relationship of individual state agencies to the State Bureau of Personnel, or of the city water utility to the city council, or the county highway department to the county board.

The central agency did have some control, especially in fiscal matters involving state or federal aid to the local schools, and in setting and enforcing certain standards for employees of the schools and for certain of the courses or programs offered by the schools, but considerable latitude was found to exist in the system. The local schools, while not completely autonomous, just as state agencies, water utilities, and county highway departments were not autonomous, did have considerable freedom in deciding what courses were to be offered, when, and to whom. There was no uniform system of reporting full or part-time students, no uniform requirements for course content, number of courses offered, or even course titles, except in those cases where special degrees or standards had been established by state or federal requirements. Thus, the enrollment figures for one vocational school might differ from another only because different criteria were used to count students; or it might appear that different courses were being offered at different schools, but only the title, not the content, was dissimilar; or, the same course or program might appear to be offered at two different schools because similar titles were used, but in fact the two would bear few similarities.

Just as the state's central personnel agency was making progress in establishing a uniform system of reporting personnel transactions during the course of our survey, so too was the state beginning to establish uniform criteria for reporting enrollments and courses, and although a bewildering array of statistics was pouring into the Madison office--distinctions were made according to when the course was offered, how it was financed, what type of degree, or program it was a part of--some uniformity of course titles was emerging. The local schools were being required to report which of their course offerings corresponded, in essence, to those as described in the catalogue of the Milwaukee schools, and while some local schools refused to concede that their courses were essentially the same, most tried to make them fit. Thus, a fairly uniform and comparable record of course offerings, by local school, was obtained from the state agency's files for the survey.

Unfortunately, if for no other reason than it is becoming so repetitious to say it, even when we were reasonably certain that course offerings at one vocational school were the same as those offered at another, what the uniform system of reporting revealed was a tremendous variety and diversity of offerings from one vocational school to another. Some local schools specialized in technical offerings while others were heavy in business courses, and still others in home economics, or industrial subjects.

At the local level itself, there also was great diversity within and between schools in the methods used to decide which courses or programs ought to be offered--surveys of need, heads of the various departments within the school, individual teachers, local advisory committees, requests from individual employers, state and federal financial assistance for certain programs, and a plethora of other techniques, measures, criteria, and methods were used in different places to structure the total mix of offerings at the local schools.

The same diversity applied to the methods by which vocational school students, after successfully completing their period of training, were placed into jobs. About the only agreement among all vocational school directors was that the Wisconsin State Employment Service was a valuable, perhaps the most valuable, source of placing students. But hiring was done through the schools' department heads, teachers, advisory committees, interviews with prospective employers, student coordinators, counselors, and a variety of other means within the same school. Job opportunities were not funneled through any single source at any of the schools.

But like the government employer, and like the government employee, there was a theme among the variations, especially when it came to the question of how vocational schools viewed government employment, government employers, and the nature of their relationship with them. Not only were more-or-less uniform course offerings gathered from the State Board of Vocational, Technical and Adult Education, and local catalogues and enrollment figures gathered from the local schools, but every director of the local vocational school was contacted at least once, and virtually all of them twice, by members of the survey team, and like the government employers, their relationships with those employers and their impressions and beliefs about government employment, were solicited.

For the most part, the overview of state and local governments as employers, gained from the questionnaire, from the records, from the employers, and from the vocational school directors, was remarkably the same.

First, most directors agreed that their level of information about state employment opportunities was relatively high, due to the information and announcements the schools received from the state's central personnel agency, and the school's close and systematic relationships with the Wisconsin State Employment Service. But they also agreed that the number of employment opportunities the state offered vocational school students was quite small, and concentrated mainly in the entry-level clerical positions. The relatively small number of persons recruited by the state from the vocational school was attributed to several causes, including the problem that the qualifications for state jobs were set too high for the typical graduate; many required a college degree, experience, or some combination of training and experience which excluded many of their students.

There was also agreement that their level of information about city and county employment opportunities was quite low, and while some of their students were undoubtedly being recruited by the local governments in their area the number was insignificant. Unlike the fairly formalized information and contact with the state, relationships with local employers were unsystematic, informal, and "hit or miss." One of the major causes of the serious communications gap with local government employers was, nearly everywhere, the absence of any single source--agency or person--who was in charge of recruiting for the city or the county.

Other reasons offered to explain the insignificance of government--both state and local--as an employer of their students, were echoed from one school to another with surprising harmony. First and foremost, they cannot compete with private employers. Private business and industry recruits aggressively, to the extent that there are more requests than the typical school can fill. Although the security offered by government jobs is greater than that offered by private employment, their students, and particularly the younger ones, are less concerned about security than about salaries and the chance for advancement. Both the money and the chance for advancement is better in private employment.

Even if government did offer salaries competitive with industry, and did have jobs to be filled, the chances are likely they would still lose recruits to industry because government simply is not aggressive in its recruiting policies and practices.

It also was generally believed among local vocational school directors that the number of vacancies in government was very small, and those positions which did become vacant frequently were for the most part menial jobs--and thus their students were over-qualified and uninterested in them--or were positions which were not entry-level or required more training and experience than their students possessed. But government, it was believed, simply was not generating many opportunities, primarily, according to several directors, because turnover in government employment was quite low.

Government employers, and especially local government employers, were less concerned about the formal education of their sub-professional employees than was industry. Agreement on this point was virtually universal among directors, and was based on the few requests for in-service training programs that were received from government employers, and the small number of government employees who enrolled in such courses or institutes--compared to the requests from private employers and the number of non-governmental employees taking such courses. Industry, we were told, demands that their employees maintain or up-grade their skills, and the non-governmental employee, if he wants to retain his job, or if he wants to advance, must acquire additional, formal training. Government employers generally make no such demands on their labor force, although quite recently, a few employers have become concerned about continuing education--particularly among police and fire personnel and, to some extent, supervisory personnel and institutional workers--but these are the exceptions. Government employees, it is believed, either because they are not required to, or have no ambition to enroll, are found in disproportionate numbers in the continuing education offerings of the schools.

Conclusions

State and local governments in the areas surveyed employed a large number of persons in a wide variety of occupations, and if government can be thought of as a single employer, then its labor force in most of these areas probably was larger than that of any other single employer. Some idea of the potential market for the local vocational school, both for professionals and sub-professionals, for pre-employment and continuing education, may be gained from the employee rosters included at the end of this report. These rosters were for two of the more populous areas surveyed. We have included police and fire personnel as well as the employees of the public school district to illustrate the actual size of the state and local government labor force, the different types of jobs being performed, and to present a more complete picture of the potential for the schools. Even with the exclusion of those government employees within the county-area who were not employed by the county-seat city, by county government, or by the major state agencies and institutions, the size and diversity of state and local employment shown by these rosters would probably seem incredible to local vocational school directors and, for that matter, to government employers.

A complete roster of all the positions employed by the state within a single county-area was unknown to state employers within the area, and virtually no one responsible for hiring city employees had ever seen a roster of all the employees hired by his city, by position and number, and the same may be said of county employers. Government was not a single employer, except in the same sense that "business" or "industry" could be called a single employer. By selecting a large number of survey areas we thought we would assure that a wide range of employment practices would be covered. But selecting any single county-area would have produced as diverse a range of recruiting practices, employer-school relationships, and personnel policies as were found in 11 areas. Responsibility for the administration of government personnel within each area, including the recruitment of those personnel, was widely diffused, decentralized and disorganized.

The government employer and the vocational school director who believed that the manpower needs of government were not large because the size of the labor force was so small were only partially correct. Viewed from the perspective of the typical employer, who was responsible for recruiting only for his own separate agency, department, or utility, the needs of the city, the county or the state of which his agency was a part, may not have appeared to be great. Since the total size of the state, city or county labor force was not known to the typical employer, he defined government's needs only through the limited vision of his own needs. The vocational school, with no central clearing-house for government job opportunities, with government employers contacting the school through informal channels, also viewed the size of the work force of the city or county or state only in little bits-and-pieces, just as the typical employer did.

Similarly, it is not completely accurate to contend, as some employers and some vocational school directors did, that there were few job openings because turnover was so low among government employees. Our questionnaire survey results have shown us that a substantial portion of the sub-professional labor force had a relatively brief total period of employment with their government. Even excluding the professionals, police, fire, part-time and school district employees, the absolute number of new recruits annually in a county-area was quite high, as Table 17 indicates. The table shows the minimum number of full-time persons hired during 1965 (the year preceding the employee survey) who responded to our questionnaire. Taking into account the possibility that some of the sub-professionals who failed to respond (although we are sure the returns run over 80 per cent of all eligible sub-professionals in these 5 survey areas) may also have been employed for the first time in 1965, the number of new, sub-professional recruits of state and local governments was quite large, and of course would be larger still if all positions had been included. Any individual business or industrial firm which recruited from 69 to 129 new employees in one year's time, or even recruited from two to three dozen new clerical employees annually, as these state and local governments did together, would be considered an extremely important local employer--but these governments generally were not, either by individual government employers or the schools.

The division of responsibility for the personnel function between state, city and county governments, and the further division of responsibility within state, city and county governments, not only distorted the view the employer and the school had of the size and turnover of the state and local labor force, but also was the basic cause, we feel, of the information problem. No single person or agency of the state, city, or county was responsible for defining the needs of the state, city or county and seeing to it that those needs were being met. If the schools were ignorant of the manpower needs of government they could hardly be blamed, because the governments' themselves typically shared that ignorance.

TABLE 17

MINIMUM NUMBER OF SELECTED SUB-PROFESSIONAL EMPLOYEES HIRED IN 1965, BY OCCUPATION: INCLUDES EMPLOYEES OF STATE, COUNTY, AND COUNTY SEAT-CITY IN SELECTED AREAS

	Occupational Classification	Brown County Area	La Crosse County Area	Eau Claire County Area	Waukesha County Area	Portage County Area
1.	Clerical Supvr.	1	1	0	0	1
2.	Auditor/Accountant	0	0	0	1	0
3.	Administrative Asst	1	0	0	0	2
4.	Library, Museum Wkr	0	0	2	0	3
5.	Account Clerk	0	1	3	1	1
6.	Clerical/Office Mach. Oper	25	32	38	25	24
7.	Engr., Plan. Technician	5	4	3	4	0
8.	Assessor/Appraiser	1	2	0	2	0
9.	Lab. Tech	1	0	0	1	0
10.	Inspect./Examination	5	4	2	2	0
11.	Storekeeper	1	2	1	1	1
12.	Institutional Supvr	0	0	0	0	0
13.	Lic. Pract. Nurse	3	0	0	1	0
14.	Rehabilitation Worker	0	0	0	13	1
15.	Institutional Worker	17	14	16	42	10
16.	Laundry Worker	0	3	2	2	0
17.	Food Service Worker	2	4	5	3	3
18.	Pump, Engine, Boiler Oper	1	1	0	3	1
19.	Skilled Craftsman	6	2	4	6	2
20.	Semi-skilled	2	2	4	2	1
21.	Foreman/Supvr	1	0	0	1	0
22.	Equipment Operator	6	2	1	10	3
23.	Unskilled Labor and Custodial	9	22	14	7	16
24.	All other and n/a	0	1	1	2	0
	Total, 1965	87	97	96	129	69
	All Sub-professionals	843	699	602	711	297

Thus, school-employer relationships were as poor as we had suspected they would be when this project was undertaken, and the communications problem was caused by an information problem which, in turn, was the result primarily of the way government was organized. We are not suggesting that a single, centralized agency for all personnel employed by the three levels of government within an area be established, although we are not ready to reject that idea either. While it may make sense for two profit-making businesses to be in competition with each other for personnel, it makes less sense for a city and a county government in the same area to compete with each other for employees performing the same duties for each government, and to set different standards for eligibility. Some centralization of the personnel function was needed in government, at least within the same government, and at least a centralization of personnel transactions, if the information problem was ever to be solved.

In comparison to the large manpower demands of state and local governments, the opportunities for vocationally-trained youths seemed quite small. We found no real contradiction between the schools' assessment of those opportunities, the government employers' preferences, personnel practices, and the characteristics of the respondents to the employee questionnaire.

Vocationally-trained youths excluded themselves from certain sub-professional government positions either because the pay was too low, the job too menial, or the chances for advancement too limited--in comparison to the opportunities available from private employers.

Vocationally-trained youths were excluded from other sub-professional positions either because the training or experience qualifications were too high, the jobs were open only to incumbent employees, or information about the jobs was not available to them.

The first step in improving school-employer communications is improvement of governments' system of personnel administration, including the centralization and continuous up-dating of personnel information, review of the duties, responsibilities and qualifications for positions, and the establishment of clear opportunities and avenues for advancement based on the employees' ability to demonstrate an improvement in his job skills rather than upon tenure or seniority alone.

The role of the local vocational schools would seem to be two-fold. First, to serve as a constant and vocal critic of personnel policies and practices which are in obvious need of improvement, including: salary and wage scales which are clearly out-of-line with current local market conditions; educational and experience qualifications which are set unreasonably high, or low; recruitment policies which effectively exclude employment opportunities to recruits at all but the lowest level positions. Second, working together with employee representatives, department or agency heads, and, most importantly, with the elected policy-makers, to establish in-service training programs for incumbent employees where the need for such programs is evident, and to encourage and promote the enrollment of incumbent employees in existing continuing education programs that are relevant to the jobs being performed by those employees.

The information collected through the employee questionnaire, the search of personnel records, budgets, and other documents, and our conversations with employers and vocational school personnel is being put in suitable form for transmittal back to the county-areas where it was obtained.

It will form the basis of a series of conferences with government employers, vocational and high school curriculum planners, the state employment service, elected policy-makers, and public employee representatives--all of whom, we are convinced, must be informed, and cooperate if improvements in the current situation are to be made, and the manpower needs of government are to be filled with adequately trained personnel.

Summary

This project was the research phase of a three-part program designed to define the potential demand by state and local governments for youths trained by vocational-technical schools. It is to be followed by a series of conferences between school personnel and government officials who will study the information obtained through this project in order to produce a pilot program that will serve as a model for improving relationships between the schools and the state and local government personnel systems to assure that an adequate number of qualified recruits will be available to meet the sub-professional manpower needs of state and local governments.

The major assumption underlying the project was that the schools were unaware of government's needs, and that government employers were unaware of the trained recruits that the schools could provide. The lack of communication between the schools and employers, we hypothesized, was due to a lack of sound information about the types of positions employed by government, and about the types of programs offered by the schools.

Eleven county-areas were selected in Wisconsin which contained a vocational school that was part of the state-wide system of vocational, technical, and adult education, and which also contained a substantial number and variety of state and local government personnel. Budgets, personnel rosters, job specifications, and other documents were collected and reviewed, and interviews with government officials were conducted to determine the number and types of positions employed by the county-seat city, the county government, and the state agencies and institutions within the county-area, and which of those positions could be filled by recruits who had not graduated from college. These non-degree positions were classified as "sub-professional," and potentially could be filled by vocationally-trained youth.

In addition to obtaining information about the size and composition of the sub-professional labor force employed by state and local governments in each area, the characteristics of the persons currently employed in those positions and of the jobs they held, were ascertained through a questionnaire distributed to all eligible employees.

The course offerings of the vocational schools in each area also were obtained, and school personnel were interviewed to determine their relationships with government employers, and their level of information about the manpower needs of government.

Over 6,500 employee questionnaires were completed, coded, and the information obtained was processed by computer. These data have been analyzed and, along with the other information obtained will be transmitted back to the government employers and schools in the local areas.

The size of the sub-professional labor force of government in each area was substantial, and the variety of sub-professional occupations was immense. Thus, the potential market for youth trained in the local vocational school was large, as measured by the number of positions for which college graduation was not a pre-condition of employment. The number of vocationally-trained young persons who actually were recruited to fill these positions was, compared to the potential, quite small.

One major reason why vocational school graduates were found in small numbers among the sub-professional labor force of government was that although these jobs did not require a college degree, other pre-conditions of employment had been either officially or unofficially established by government. Many occupations were open only to those who had considerable employment experience, either with the employing government, or elsewhere. The standards of training (that is, some college), work experience, or a combination of these excluded the vocationally-trained youth and young people generally, from employment. Some of these limitations were specifically written into the official standards adopted by government--particularly the state government. But a bias against youth, no matter how well trained, also was discovered among employers--particularly local government employers who typically were not guided in their employment practices by official standards adopted by their government, but set their own standards. The older, experienced recruit was preferred either because the employer thought he was less likely to terminate employment after a brief period, or because the employer thought experience was the only way the job could be learned.

Another major reason why relatively few young people were recruited was because a high proportion of the positions were not filled by recruits but by persons already employed by government. Either because of union rules which specified that union members employed by the government had first choice on jobs which became vacant, or because the incumbent worker learned about impending vacancies before the potential recruit was informed, or again, because some employers felt experience on the job, even if it was a different type of job but within their labor force, was more important than education, the better-paying, more highly-skilled, or more attractive positions were filled from within the service, and only the low-pay, low-skill, less attractive positions were open to new applicants.

The number of these menial jobs for which the vocationally-trained youth would be overqualified, or unattracted to, comprised a substantially large proportion of the total number of subprofessional positions.

Vocationally-trained youth also were not being recruited by government because government did not compete with private business or industry, either in the aggressiveness of its recruiting practices, which were informal and unsystematic, or in terms of monetary rewards or the promise of advancement.

Finally, very little was known about government jobs, either by the schools, the students, or the government employers themselves. Only the state, and two or three of the city governments, had anything resembling a modern personnel system. Personnel administration, including the establishment of qualifications, recruitment, and the maintenance of personnel records, was diffused within the typical government among the many semi-autonomous agencies and institutions that were only loosely tied together as a single governmental entity.

The results of our specific findings in each county-area will be reported to the local area and be used as the basis of conferences between representatives of the schools, the governments, and the employees.

THE UNIVERSITY OF WISCONSIN
UNIVERSITY EXTENSION DIVISION

Winter, 1966

12082

GOVERNMENT EMPLOYMENT AND TRAINING OPPORTUNITIES PROJECT

Today more than seven million people work for state and local governments in the United States. Over 100,000 of them work--like you--right here in Wisconsin. But more people are needed and the number of new government jobs grows larger every year.

The University of Wisconsin has been asked to help make sure that enough men and women will be ready for government employment when they are needed. We need to find out how many state and local workers, in what kinds of jobs, need what kinds of training or experience, to do the work of these governments.

One way to find this out is to ask people who already work for state or local governments--you and your co-workers. Other kinds of studies will be made, but your answers to these few questions about yourself and your job will be most helpful to us.

We thank you for your cooperation.

Sincerely yours,
Edward Schten
Edward Schten, Project Director

This is not a test. If you don't have time to answer the questions during working hours, please answer them at home. Tomorrow, give them back to the person who gave them to you. If you can't remember some of the information we ask for, please answer with your best guess. Many of the questions can be answered simply by placing a ✓ or × in front of the appropriate response.

1. Your name (please print): ______________________________

2. Your sex: ___Male ___Female

3. Date of birth: _____Month, _____Day, _____Year

4. Place of birth: ______________City or town, ___________State or Country

5. Marital status: ___Married ___Widowed ___Divorced ___Separated ___Single

6. Name of the county in which you work: ______________________

7. Name of the city department, agency, or institution for which you work:

____

8. Name or title of your present job: ______________________

9. What do you actually do on your present job? Please list your major tasks, duties, or responsibilities: ______________________

____

____

(GO ON TO NEXT PAGE)

10. What single most important skill, training, or special education, if any, would you recommend a person should have to prepare for a job like your present job?

____None, or (specify): ________________________________

____

11. What further training, if any, would be useful to you in doing your present job?

____None, or (specify): ________________________________

____

12. Have you ever been employed by this city government in any job other than your present job? ____Yes ____No IF YES , please list your previous jobs with this city on the following chart.

Name or title of previous job with this city	Name of the city dept. or institution which employed you	Dates of Employment			
		From		To	
		Mo.	Yr.	Mo.	Yr.
			19		19
			19		19

13. Besides your employment by this city, please check each of the employers listed below for which you have worked (check all that apply).

____Another city government ____A county government ____None of these

____A state government ____A federal agency

14. Besides your employment by this city, have you ever had any job (either government or non-government) which helped prepare you for your present job? ____Yes ____No IF YES , please list those jobs on the chart below.

Name of business firm or government where experience was received	Type of work experience you received, or type of skills you learned	Dates of Employment			
		From		To	
		Mo.	Yr.	Mo.	Yr.
			19		19
			19		19

15. How did you first find out about the possibility of employment by this city government? (Please check the one response which best applies.)

____From an advertisement or announcement
____From a former employer
____From a vocational school counselor or teacher
____From a high school counselor or teacher
____From a state employment agency
____From a friend
____Other means (please specify): ____________________

____

16. In what month and year did you begin working at the particular job you now hold with this city? ______(MONTH), 19____

(GO ON TO NEXT PAGE)

17. On the following chart, please list any type of machinery, equipment, or vehicle you operate on your present job (for example, trucks, typewriters, tractors, IBM card punchers, boilers, adding or duplicating machines, medical equipment, power tools, and so forth).

Type of machinery, equipment, or vehicle you operate on your present job. (List each item on a separate line)	Where did you first learn to operate this item? (Please check or explain)				
	At sch.	On present job	On earlier job	At home	Other (please explain)

18. Have you ever completed any kind of course from a Vocational School or Technical Institute? _____ Yes _____ No IF YES, please list the Vocational School or Technical Institute courses you completed on the chart below, and answer Question 18a.

Name or type of course or program	Name of Vocational School or Technical Institute	Location		Dates you took course			
				From		To	
		City	State	Month	Year	Month	Year
					19		19
					19		19
					19		19
					19		19

18a. Besides your regular salary or wages, has this city government ever helped you pay for any of the indirect or direct costs of any of the courses you listed in Question 18? _____ Yes _____ No IF YES, please check any of the following costs which this city did help pay. (Check all that apply)

___ Travel expenses ___ Registration fees ___ Book purchases

___ Tuition ___ Other costs (explain): ______________________________

19. Did you attend high school? _____ Yes _____ No IF YES: please record the information requested below about the last high school you attended, and answer Question 19a.

______________________ ________ __________ __________________
(NAME OF HIGH SCHOOL) (CITY) (STATE) (YEAR LAST ATTENDED)

19a. Were your high school courses mainly...(Check one)

___ Business ___ Technical ___ College preparation ___ General

(GO ON TO LAST PAGE)

20. What was the highest elementary or high school grade you completed?

___5th or less ___7th ___ 9th ___11th ___College work

___6th ___8th ___10th ___High school graduate

21. Have you ever completed any courses at business schools, military schools, colleges, or universities? ___Yes ___No IF YES , please list these courses or the subject majored in in the chart below and answer Question 21a.

Name or type of course or major subject	Name and type of school attended	Location		Dates you took course			
				From		To	
		City	State	Month	Year	Month	Year
					19		19
					19		19
					19		19
					19		19

21a. Did this city help pay the costs of any of the courses you've listed in Question 21? ___Yes ___No IF YES , please check any of the following costs which this city did help pay. (Check all that apply.)

___Travel expenses ___Registration fees ___Book purchases

___Tuition ___Other costs (explain): ___________________________

22. Besides the courses you have already listed, have you ever attended any other lectures, films, or demonstrations that were related to your present job with this city? ___Yes ___No IF YES , please list the type of subjects given at these lectures, films, or demonstrations, and answer Question 22a.

____

____

____

22a. Did this city sponsor or help pay the costs of any lectures, films, or demonstrations you listed above? ___Yes ___No

23. Have you ever received a training certificate? ___Yes ___No ...a job license? ___Yes ___No ...a work permit? ___Yes ___No ...an educational degree or diploma? ___Yes ___No IF YES to any of these, please list the type of certificates, licenses, degrees, or diplomas on the lines below.

____

____

____

THANK YOU VERY MUCH. PLEASE GIVE THE COMPLETED QUESTIONNAIRE
BACK TO THE PERSON WHO GAVE IT TO YOU.

GREEN BAY CITY EMPLOYEE ROSTER: 1966-'67

ASSESSOR
- City Assessor - 1
- Deputy City Assessor - 1
- Property Appraiser II - 1
- Property Appraiser I - 1
- Assessment Clerk - 1

ATTORNEY
- City Attorney - 1
- Assistant City Attorney - 1
- Secretarial Stenographer - 1
- Clerk Stenographer II - 1

CLERK
- City Clerk - 1
- Deputy City Clerk II - 1
- Deputy City Clerk I - 1
- Administrative Clerk - 1
- Clerk Typist - 3 (seasonal, 3 mos.)

CITY HALL MAINTENANCE
- Building Maintenance Supervisor - 1
- Building Custodian II - 2

COMPTROLLER
- City Comptroller - 1
- Deputy City Comptroller/Accountant - 1
- Secretarial Stenographer - 1
- Account Clerk - 1
- Clerk Stenographer II - 1
- Tabulating Equipment Operator - 1
- Clerk Typist - 1 (½ time)

COURTS
- Municipal Judge - 2
- Court Clerk - 2

FIRE
- Fire Chief - 1
- Assistant Fire Chief - 2
- Deputy Fire Chief - 3
- Fire Captain - 11
- Fire Lieutenant - 9
- Fire Inspector - 2
- Driver/Pump Operator - 32
- Firefighter - 64
- Record Clerk - 1

HEALTH

Health Commissioner - 1
Deputy Registrar of Vital Statistics - 1
Clerk-Stenographer I - 1
Clerk-Stenographer II - 1
Clerk Typist II - 1
Health Laboratory Director - 1
Health Laboratory Technician - 1
Health Laboratory Assistant - 1
Public Health Nursing Supervisor - 1
Public Health Nurse II - 7
Registered Nurse - 3
Public Health Sanitation Supervisor - 1
Public Health Sanitarian II - 1
Public Health Sanitarian I - 4

INSPECTION

Superintendent of Inspection - 1
Building Inspector - 1
Assistant Building Inspector - 1
Heating and Air Pollution Inspector - 1
Plumbing Inspector - 1
Assistant Plumbing Inspector - 1
Electrical Inspector - 1
Assistant Electrical Inspector - 1
Clerk Stenographer II - 1
Zoning Inspector - 1

INSURANCE

City Insurance Administrator - 1
Clerk Typist - 1 (½ time)

LIBRARY

Library Director - 1
Librarian IV - 1
Librarian III - 3
Librarian II (Branch) - 2
Library Assistant III - 1
Library Assistant II - 10
Library Assistant I - 4
Secretarial Stenographer - 1
Building Custodian II - 1
Building Custodian I - 1

MAYOR

Mayor - 1
Labor Negotiator - 1 (part time)
Secretarial Stenographer - 1
Switchboard Operator - 1
Clerk-Typist - 1

MUSEUM

Museum Director - 1
Chief Curator - 1
Museum Curator II - 2
Museum Curator I - 1
Museum Registrar - 1
Building Custodian II - 1

PARKS, RECREATION AND FORESTRY

Director of Parks, Recreation and Forestry - 1
Superintendent of Parks - 1
Superintendent of Recreation - 1
Forester - 1
Landscape Architect - 1
Assistant Superintendent of Parks - 1
Recreation Program Supervisor - 2
Shop Foreman - 1
Office Manager - 1
Administrative Clerk - 1
Clerk Stenographer III - 1
Clerk Stenographer II - 1
Clerk Stenographer I - 1
Clerk Typist II - 1
Swimming Pool Manager - 3 (seasonal)
Pool Crew Chief - 6 (seasonal)
Pool Guard/Instructor - 9 (seasonal, 3 part time)
Lifeguard - 12 (seasonal, 6 part time)
Pool Attendant - 12 (seasonal)
Pool Concession Operator - 6 (seasonal)
Pool Custodian - 3 (seasonal)
Beach Manager - 1 (seasonal)
Beach Helper - 12 (seasonal)
Truck Driver - 7
Mower Operator - 4
Equipment Operator - 5
Tree Trimmer - 4
Park Security - 1
Carpenter - 1
Carpenter's Helper - 1
Mechanic/Welder - 3
Painter - 1
Labor Helper - 53 (50 part time or seasonal)

POLICE

Police Chief - 1
Police Captain - 5
Police Lieutenant - 11
Police Sergeant - 15
Police Detective - 10
Police Corporal - 12
Police Patrolman - 68
Clerk-Stenographer II - 5
Clerk-Typist I - 1
Secretarial Stenographer - 1

Meter Maid - 3
Parking Meter Supervisor - 1
Parking Meter Serviceman - 2
Park Policeman - 3
Signman III - 1
Signman II - 1
Signman I - 1
Custodian - 3 (2 part time)
Poundmaster - 1 (part time)
Crossing Guard - 22 (1 part time)

PLANNING, REGIONAL
City-County Planning Director - 1
Planner II - 3
Planner I - 1
Engineering Aid II - 1
Clerk Stenographer III - 1

PUBLIC WORKS
Director of Public Works - 1
Assistant Director of Public Works - 1
Civil Engineer III - 1
Engineering Technician II - 2
Engineering Technician I - 3
Civil Engineer I - 1
Engineering Aid III - 2
Engineering Aid II - 4
Secretarial Stenographer - 1
Bridge Foreman - 1
Bridge Maintenance Man - 1
Superintendent of Street Maintenance - 1
Superintendent of Sanitation - 1
Office Manager - 1
Sanitation Foreman - 1
Street Foreman - 1
Timekeeper/Records Clerk - 1
Parts Manager - 1
Stores Clerk - 1
Incinerator Foreman - 1
Building Custodian II - 1
Building Custodian I - 3
Duplicating Services Supervisor - 1
Duplicating Machine Operator - 2
Truck Driver - 39
Truck Helper - 111 (5 seasonal)
Front-End Loader Operator - 5
Sweeper Operator - 4
Flusher Operator - 1
Tractor Operator - 5
D8 Cat. Operator - 1
Grader Operator - 5

Signman - 1
Tireman - 1
Welder - 1
Mechanics' Foreman - 1
Mechanic - 5
Sewer Foreman - 1
Electrician Foreman - 1
Electrician - 2
Electrician Helper - 1
Bridge Painter Foreman - 1
Bridge Painter - 1
Incinerator Foreman - 1
Incinerator Helpers - 6
Special Carpenter - 1
Regular Carpenter - 1
Stadium Groundskeeper - 1
Stadium Helper - 1
Weed Cutter - 5 (seasonal)
Engineering Aides - 6 (seasonal)
Parking Ramp Cashiers - 5 (2 part time)
Parking Lot Attendants - 8 (1 part time)

PURCHASING
Purchasing Agent - 1
Account Clerk - 2

SEALER AND FARMERS' MARKET SUPERVISOR - 1

TREASURER
City Treasurer - 1
Deputy City Treasurer - 1
Administrative Clerk - 1
Account Clerk - 1
Clerk-Typist - 5 (seasonal, 3 mos.)

WATER UTILITY
General Manager - 1
Chief Operator - 1
Chief Electrician - 1
Chief Distribution Foreman - 1
Chemist - 1
Meter Repair Foreman - 1
Chief Meter Reader - 1
Engineering Clerk/Draftsman - 1
Office Manager - 1
Operator - 9 (1 part time)
Meter Repairman - 2
Meter Reader - 4
Labor Foreman - 1
Maintenance - 1
Home Service - 2
Account Clerk - 1
Secretary - 1
Clerk Typist I - 5 (1 part time)
Laborer - 6

WELFARE

Director of Public Welfare - 1
Caseworker II - 1
Caseworker I - 1
Clerk Stenographer III - 1
Clerk Typist II - 1
Account Clerk - 1

VOCATIONAL, TECHNICAL AND ADULT SCHOOL

Director - 1
Business Manager - 1
Curriculum Supervisor - 1
Student Services Supervisor - 1
Departmental Coordinators - 5
Teachers - 111 (75 part time)
Secretarial Supervisor - 1
Stenographer - 5 (1 part time)
Account Clerk - 1
Receptionist - 1
Librarian Clerk - 1 (part time)
Chief Building Engineer - 1
Custodian - 5
Cook - 1
Cook's Helper - 2
Laundress - 1 (part time)
Student Monitor - 2 (part time)

BOARD OF EDUCATION

Superintendent of Schools - 1
Administrative Assistant - 1
Superintendent of Buildings and Grounds - 1
Psychometrics - 2
Director of Special Education and Child Study - 1
Director of Instructional Media - 1
Director of Cafeterias - 1
Director of Elementary Education - 1
Elementary Supervisor - 1
Director of Audio-Visual Instruction - 1
Assistant Superintendent for Instruction - 1
Social Worker - 1
High School Principal - 4
Junior High School Principal - 2
Assistant High School Principal - 4
Assistant Junior High School Principal - 2
Attendance Officer - 1
Elementary School Principals - 20
Substitute Teachers - 15 (10-20 full-time equivalent)
Elementary and Secondary Teachers - 780
Administrative Secretary - 1
Stenographer III - 3
Stenographer II - 11
Stenographer I - 13

Typist III - 6
Typist II - 4
Typist I - 18
Secretary-Stenographer - 1
Office Clerk - 3
Payroll Clerk - 1
Clerk/Receptionist - 1
Bookkeeping Machine Operator - 1
Stores Clerk - 1
Library Assistant I - 7
Elementary Library Clerk - 2
Custodial Foreman - 2
Custodian III - 4
Custodian II - 31
Custodian I - 28 (4 part time)
Custodian-Fireman - 24
Engineer - 7
Painter - 4
Maintenance Mechanic - 4
Utility Worker - 4
Fireman - 4
Carpenter - 3
Bus Driver - 3
Electrician - 2
Auto Mechanic - 1
Truck Driver - 1
Laundry Worker - 1
Delivery - 1
Head Cook - 7
Assistant Cook - 14 } (none work 40 hr. week)
Cook's Helper - 19

BROWN COUNTY EMPLOYEE ROSTER: 1966-'67

AGENT

- Agricultural Agent - 1
- Farm Management Agent - 1 (part time)
- 4-H Club Agent - 1
- Secretarial Stenographer - 1
- Clerk Stenographer II - 1

AIRPORT

- Manager - 1
- Maintenance Supervisor - 1
- Maintenance Mechanic - 4
- Secretarial Stenographer - 1
- Janitress - 1

ALCOHOLISM EDUCATION CENTER

- Director - 1
- Stenographer - 1 (part time)

ARENA

- Administrator - 1
- Maintenance Supervisor II - 1
- Maintenance Mechanic Foreman - 1
- Maintenance Mechanic - 3
- Office Manager - 1
- Activity Foreman - 1
- Custodian I - 4
- Ice Professional - 1
- Clerk Stenographer II - 1
- Janitress - 1

BOOKMOBILE

- Driver - 1
- Clerk Typist I - 1
- Library Assistant I - 1 (part time)

CIRCUIT COURTS

- Judge - 2
- Court Reporter - 2 (part time)

CLERK OF COURTS

- Clerk of Courts - 1
- Deputy Clerk of Courts - 3
- Clerk Typist III - 1

CONSUMER MARKETING AGENT

- Consumer Marketing Agent - 1
- Clerk Stenographer II - 1

- CLERK
  - County Clerk - 1
  - Insurance Administrator - 1
  - Chief Accountant - 1
  - Account Examiner - 3
  - Account Clerk - 2
  - Secretarial Stenographer - 1
  - Clerk Stenographer III - 1
  - Clerk Typist II - 1

- CORONER - 1

- CORPORATION COUNSEL
  - Corporation Counsel - 1
  - Clerk Stenographer II - 1

- COUNTY BOARD
  - Clerk Typist III - 1

- COUNTY COURTS
  - Judge - 3
  - Register in Probate - 1
  - Court Reporter - 4
  - Deputy Clerk - 1
  - Secretarial Stenographer - 1
  - Clerk Stenographer III - 2
  - Clerk Stenographer II - 1
  - Clerk Typist III - 1

- COURTHOUSE MAINTENANCE
  - Building Maintenance Supervisor II - 1
  - Assistant Building Maintenance Supervisor - 1
  - Maintenance Mechanic - 4
  - Janitress - 7

- DISTRICT ATTORNEY
  - District Attorney - 1
  - Assistant District Attorney - 2
  - Clerk Stenographer III - 2

- ELECTRICIAN
  - Electrician - 1
  - Electrician's Helper - 1

- EMERGENCY GOVERNMENT
  - Director - 1 (part time)
  - Deputy Director - 1
  - Assistant - 2 (part time)
  - Shelter Officer - 1
  - Clerk Stenographer III - 1

- FAIR PROPERTIES
  - Caretaker - 1
  - Bookkeeper - 1 (part time)

FAMILY COURT COMMISSIONER
Court Commissioner - 1
Clerk Stenographer II - 1

GOLF COURSE
Superintendent - 1
Helpers - 12 (seasonal)

GUIDANCE CLINIC
Psychologist - 1
Psychiatric Social Worker - 5 (1 part time)
Clerk Stenographer III - 1
Clerk Stenographer II - 1
Clerk Typist II - 2
Medical Doctor - 4 (part time)

HARBOR COMMISSION
Port Director - 1
Stenographer - 1 (part time)

HIGHWAY DEPARTMENT
Commissioner - 1
Office Manager - 1
Accountant - 1
Timekeeper - 1
Stenographer - 1
Key Punch Operator - 1
Highway Superintendent - 2
Shop Superintendent - 1
Stockroom Clerk - 1
Engineer - 1
Bridge and Building Superintendent - 1
State Patrolman - 8
County Patrolman - 4
Blacksmith - 1
Heavy Equipment Operator - 11
Surveyor - 3
Truck (Patrolman) Helper - 12
Grader Operator - 12
Bridge Worker - 8
Sign Painter - 2
Gas Truck Driver - 1
Mechanic - 10
Blacktop Foreman - 2
Grade Foreman - 2
Gravel Checker - 1
Janitress - 1
Stockroom Clerk Helper - 1
Watchman - 3
Maintenance Man - 1
Blacksmith Helper - 1
Road Sweeper Operator - 1
Blacktop Equipment Operator - 12
Sulphite Tank Driver - 3
Mower Operator - 10
Truck Driver - 2
Labor - 9 (seasonal)

HOME AGENT
- Home Agent - 2 (part time)
- Clerk Stenographer II - 1

HOSPITAL
- Superintendent - 1
- Assistant Superintendent - 1
- Psychiatrist - 3 (part time)
- Internist - 2 (part time)
- Dentist - 1 (part time)
- Occupational Therapist - 1
- Occupational Therapist Aide - 1
- Activity Aid - 2 (1 part time)
- Registered Nurse - 4 (2 part time)
- Licensed Practical Nurse - 11 (4 part time)
- Nurses Aide and Orderly - 37 (1 part time)
- Social Worker - 2
- Caseworker - 1 (part time)
- Beautician - 1
- Barber - 1
- Volunteer Coordinator - 1 (part time)
- Clerk Typist - 4
- Food Service, Laundry, Maintenance and Farm - 30

NURSE
- County Nurse - 1
- Assistant County Nurse - 1
- Clerk Stenographer II - 1

PARKS
- Caretaker - 2 (part time)
- Park Superintendent - 2
- Assistant Superintendent - 3 (1 part time)
- Cook - 1

REGISTER OF DEEDS
- Register of Deeds - 1
- Deputy Register of Deeds - 1
- Document Clerk II - 3
- Document Clerk I - 4

SAFETY OFFICER - 1 (part time)

SANATORIUM
- Medical Doctor - 1
- Superintendent (RN) - 1
- Registered Nurse - 10 (6 part time)
- Clerk Typist - 4 (2 part time)
- Bookkeeper - 1 (part time)
- X-Ray Technician - 1
- Laboratory Technician - 1
- Visiting Teacher - 1 (part time)
- Laundry - 4
- Watchman - 2 (part time)

Nursing Aides - 8 (5 part time)
Food Service Workers - 6 (2 part time)
Cook - 1
Cook's Assistant - 1
Cook's Helpers - 6 (2 part time)
Maintenance Man - 6 (1 part time)
Janitress - 2

SCHOOL FOR HANDICAPPED CHILDREN
Teacher - 11 (2 part time)
Cook - 1 (9 mos.)

SHERIFF
Sheriff - 1
Chief Deputy - 1
Clerk Stenographer III - 1
Clerk Stenographer II - 1
Polygraph Operator Investigator - 2
Officer - 1
Huber Law Officer - 1
Process Server - 2
Court Officer - 1
Record Clerk Officer - 1
Account Examiner - 1
Investigator Lieutenant - 1
Radio Technician - 1 (part time)
Jailer - 7
Matron - 4 (full-time equivalent)

SURPLUS COMMODITIES PROGRAM DIRECTOR - 1

SURVEYOR
County Surveyor - 1
Deputy Surveyor - 1

TAX LISTING
Tax Listing Supervisor - 1
Assistant Tax Listing Supervisor - 1
Clerk Typist III - 1
Offset Duplicating Pressman - 1

TELEPHONE EXCHANGE
Switchboard Operator II - 1
Switchboard Operator I - 1

TRACT INDEX
Tract Index Supervisor - 1
Clerk Typist III - 1
Clerk Typist II - 1 (part time)

TRAFFIC DIVISION
- Chief - 1
- Captain - 1
- Lieutenant - 4
- Sergeant - 5
- Officer - 33
- Radio Technician - 1
- Clerk Stenographer II - 1

TREASURER
- County Treasurer - 1
- Deputy County Treasurer and Land Agent - 1
- Account Examiner - 1
- Account Clerk - 2

UNIVERSITY CENTER MAINTENANCE
- Building Maintenance Supervisor I - 1
- Maintenance Mechanic - 1
- Custodian II - 5

VETERANS' SERVICE OFFICER
- Veterans' Service Officer - 1
- Assistant Veterans' Service Officer - 1
- Secretarial Stenographer - 1
- Clerk Stenographer III - 1
- Clerk Stenographer II - 1

WELFARE
- Director - 1
- Social Work Supervisor I - 3
- Social Worker III - 1
- Social Worker II - 9
- Social Worker I - 11
- Administrative Assistant - 1
- Caseworker I - 1
- Stenographer II - 2
- Stenographer I - 7
- Clerk III - 2
- Clerk II - 1
- Homemaker - 2
- Typist I - 1

ALL OTHER PART TIME, UNSPECIFIED POSITIONS
- Total Salaries and Wages - $22,808

GREEN BAY AREA STATE EMPLOYEE ROSTER (MAJOR* STATE GOVERNMENT EMPLOYERS): 1966-'67

DISTRICT 3 STATE HIGHWAY COMMISSION

Account Examiner - 1
Administrative Assistant III - 1
Administrative Assistant I - 1
Civil Engineer VI - Highways - 1
Civil Engineer V - Highways - 3
Civil Engineer IV - Highways - 10
Civil Engineer III - Highways - 18
Civil Engineer II - Highways - 8
Civil Engineer I - Highways - 3
Draftsman III - 4
Draftsman II - 3
Draftsman I - 3
Engineering Aid V - 4
Engineering Aid IV - 11
Engineering Aid III - 16
Engineering Aid II - 14
Engineering Aid I - 1
Right of Way Agent IV - 1
Right of Way Agent III - 1
Right of Way Agent II - 3
Right of Way Agent I - 3
Stenographer III - 1
Stenographer II - 1
Typist II - 4

WISCONSIN STATE REFORMATORY

Administration

Account Assistant II - 1
Account Clerk - 1
Account Examiner - 1
Bookkeeping Machine Operator II - 1
Institutional Business Manager IV - 1
Institutional Business Manager I - 1
Institutional Security Director - 1
Institutional Superintendent II - 1
Institutional Treatment Director - 1
Personnel Officer I - 1
Prison Record Clerk II - 1
Prison Record Clerk I - 2
Secretarial Stenographer - 1
Stenographer II - 1
Storekeeper III - 1
Storekeeper I - 1
Typist III - 1
Typist II - 3

State - Green Bay Area

Subsistence
Baker II - 1
Chef - 3
Food Service Manager II - 1
Meat Cutter II - 1

Medical
Graduate Nurse IV - 1
Graduate Nurse III - 2
Physician - 2
Typist II - 1

Dental
Dentist II - 1
Dentist I - 1

General Supervision
Officer VI - 3
Officer V - 6
Officer III - 20
Officer I - 110

Mail Inspection
Officer III - 1
Officer I - 2
Typist II - 1

Supervision Camps
Farm Foreman II - 1
Officer III - 5
Officer I - 1

Recreation
Teacher IV - 1
Teacher II - 2
Therapist IV - Recreation - 1

Education
Industries Superintendent I - 1
Principal II - 1
Stenographer II - 1
Teacher V - 1
Teacher IV - 9
Teacher III - 7
Teacher II - 5
Teacher - 4
Typist II - 1

Religion
Chaplain - 2

Guidance
Social Worker III - 2
Social Worker I - 4
Social Worker - 2
Stenographer II - 1
Therapy Assistant III - 1
Typist III - 1
Typist II - 3
Welfare Administrator II - 1

Power Plant
Boiler Operator II - 3
Clerk III - 1
Maintenance Mechanic II - 1
Operating Engineer IV - 1
Operating Engineer III - 1
Operating Engineer I - 8
Superintendent, Buildings and Grounds III - 1

General Plant
Motor Vehicle Operator II - 1

General Repair and Maintenance
Maintenance Craftsman - 5
Maintenance Craftsman Foreman II - 1
Maintenance Craftsman Welder - 1
Mechanician I - 1

Farm
Dairy Plant Worker - 1
Gardener II - 1
Herdsman III - 1
Herdsman I - 2
Officer IV - 1
Officer III - 4
Officer I - 2

*In the Green Bay-Brown County area, as in most other areas in this survey, a variety of state agencies maintain local offices, including the Department of Agriculture, Public Welfare, Conservation, Motor Vehicle, the State Board of Health, and the State Industrial Commission (Employment Service, Unemployment Compensation offices), each employing from a half-dozen to two-dozen or more state employees, mainly in the clerical, inspection/examination, and auditor/accountant occupational categories. For example, in the Green Bay-Brown County area, approximately 100 state employees, in addition to those listed under the two major state employers, are scattered among these minor employers.

WAUKESHA CITY EMPLOYEE ROSTER - 1966-'67

ASSESSOR
- City Assessor - 1
- Deputy Assessor II - 1
- Deputy Assessor I - 1
- Clerk, Assessor - 1
- Typist, Clerk I - 1

ATTORNEY
- City Attorney - 1
- Assistant City Attorney - 1
- Secretary, Legal - 1

CEMETARY
- Administrator, Cemetary - 1
- Foreman, Cemetary - 1
- Caretaker II - 1
- Caretaker I - 1
- Stenographer, Secretary - 1

CIVIL DEFENSE DIRECTOR - 1

CLERK
- City Clerk - 1
- Deputy City Clerk - 1
- Stenographer, Clerk III - 1

COMPTROLLER
- City Comptroller - 1
- Accounting Clerk II - 2
- Bookkeeping Machine Operator - 1
- Deputy Comptroller - 1
- Typist, Clerk I - 1

FIRE
- Fire Chief - 1
- Assistant Fire Chief - 2
- Captain - 2
- Lieutenant - 4
- Fire Inspector - 1
- Fire Fighter - 41

INSPECTION
- Inspector, Super. (Bldg. and Plumb.) - 1
- Inspector, Ass't. Super. (Bldg. and Elec.) - 1
- Inspector, Carpentry and Masonry - 1
- Inspector, Heating - 1
- Stenographer, Clerk III - 1

LIBRARY

Director, Public Library - 1
Admin. Asst. & Cataloguer - 1
Librarian (Reference, Childrens) - 2
Librarian Assistant II - 2
Librarian Assistant I - 2
Clerical Aide - 1

MAYOR

Mayor - 1
Stenographer, Secretary - 1

MISCELLANEOUS

Construction Inspectors - part time - $8,000 item
Typist, Clerk II - 1
Custodian - 1

PARKS AND RECREATION

Director, Parks and Recreation - 1
Assistant Director - 1
Supervisor, Recreation - 1
Forester, City, Supervisor - 1
Foreman, Park and Recreation Areas - 1
Foreman, Park Bldgs. and Maint. - 1
Crew Leader, Forestry - 1
Crew Leader, Mech. & Park Maint. - 4
Crew Leader, Gardener - 1
Tree Trimmer and Maint. Man - 4
Weed Commissioner - 1
Equip. Oper. Parks - 2
Gardener - 1
Custodian, Equip. Tools Supplies - 1
Laborer, General Park Maint. - 4
Custodian, Park Bldgs. - 1
Typist, Clerk III - 1
Typist, Clerk I - 1
Account Clerk II - 1
Seasonal, Unspecified - 106

POLICE

Police Chief - 1
Assistant Police Chief - 1
Captain - 2
Lieutenant, Detective - 1
Sergeant, Identification - 1
Radio Technician - 1
Sergeant, Detective - 1
Sergeant, Desk - 1
Sergeant, Patrol - 3
Detective - 5
Patrolman - 46
Policewoman - 1
Stenographer, Secretary - 1
Typist, Clerk II - 1
Typist, Clerk I - 1

PLANNING

Director of Planning - 1
City Planner II - 1
City Planner I - 1
Stenographer, Clerk II - 1

PUBLIC WORKS

Director of Public Works - 1
Engineer, City (Civil) - 1
Superintendent, Streets and Ways - 1
Assistant Engineer, City (Civil) - 1
Engineer III (Traffic) - 1
Engineer III (Sewer) - 1
Foreman (Chief Oper.) Sewage Treatment Plant - 1
Foreman, Municipal Garage - 1
Foreman, Maint. Streets and Ways - 1
Foreman, Sanitation - 1
Supervisor, Inspector, Streets and Ways - 1
Engineer, Civil II (Sewers) - 1
Engineer, Civil II (Land Plan) - 1
Crew Leader, Grading - 1
Crew Leader, Sewers - 1
Crew Leader, Municipal Garage - 1
Mechanic, Automotive II - 4
Engineer, Civil I - 2
Motor Equip. Oper. III - 5
Operator, Sewage Treatment Plant - 5
Crew Leader, Traffic Signs - 1
Crew Leader, Rubbish Collection - 1
Crew Leader, Street Cleaning - 1
Equip. Maint. Welder - 1
Mechanic, Automotive I - 1
Engineering Aide III - 1
Motor Equip. Oper. II - 10
Clerk, Stores, Supplies, Garage - 1
Laboratory Technician - 2 (part time)
Mechanic, Traffic Sign Maint. - 1
Motor Equip. Oper. I - 13
Laborer, General - 8
Stenographer, Secretary III - 1
Mechanic Helper, Automotive - 1
Engineering Aide II - 2
Engineering Aide I - 2
Helper, Janitor, Garage - 1
Stenographer, Clerk II - 1
Engineering Aide - 2 (6 mos.)
Seasonal, Unspecified - 15

SEALER, WEIGHTS AND MEASURES - 1

TREASURER

City Treasurer - 1
Deputy Treasurer - 1
Typist, Clerk I - 1

WATER UTILITY

Manager - 1
Office Manager - 1
Secretary - 1
Bookkeeper - 1
Billing Clerk/Cashier - 1
Cashier - 1
Superintendent of Construction - 1
Meter Reader - 1
Meter Repairman - 4
Foreman - 6
Pump Operator - 3
Equip. Operator - 1
Backhoe Operator - 1
Engineering Aide - 1
Draftsman - 1
Maintenance Man - 1
Construction Worker - 3
Laborer - 7 (4 seasonal)

VOCATIONAL, TECHNICAL AND ADULT SCHOOL

Director - 1
Superintendent of Curriculum - 1
Guidance Counselor - 1
Trade & Industrial Coordinator - 1
Teachers - 65 (45 part time)
Teacher-Coordinators - 2 (part time)
Custodian - 4 (1 part time)
Work Study Students (Maint. Repair) - 20
Secretary to Director - 1
Clerk Typist - 2
Comptroller - 1
Bookkeeper - 1
Registrar - 1

BOARD OF EDUCATION

Superintendent of Schools - 1
Administrative Assistant 1
Business Manager - 1
Director of Elementary Education - 1
Director of Elementary Physical Education - 1
Music Supervisor - 1
Psychologist - 1
Social Worker - 2
Elementary School Principal/Head Teacher - 24
Middle School Principal - 1
High School Principal - 2
Middle School Assoc. Principal - 2
High School Vice-Principal - 3
Counselor - 8
Director of Community Information - 1
Librarian - 7
Librarian's Helper - 1

Waukesha City

Teacher - 637
Nurse's Aide - 2
Study Hall Supervisor - 2 (part time)
Administrator's Secretary - 14
Secretary - 10
Bookkeeper - 1
Attendance Clerk - 1
Census Clerk - 1
Clerk - 1
Cafeteria Supervisor - 1 } none work 40 hr. week)
Cafeteria Workers - 41 }
Engineers, Maintenance and Custodial Wkrs. - 66

WAUKESHA COUNTY EMPLOYEE ROSTER: 1966-'67

AGENT

Agricultural Agent - 1
Home Agent - 1
Club Agent - 1
Recreation Agent - 1
Farm Management Agent - 1
4-H Home Agent - 1
Resource Agent - 1
Clerk Stenographer III - 1
Clerk Stenographer II - 1
Clerk Stenographer I - 3

CIRCUIT COURTS

Judge - 2
Court Reporter - 2 (part time)

CLERK OF COURTS

Clerk of Courts - 1
Deputy Clerk of Circuit Courts - 1
Clerk III - 1
Clerk Typist II - 1
Account Clerk I - 1
Clerk Stenographer II - 1
Clerk I - 1

CLERK

County Clerk - 1
Chief Accountant - 1
Payroll Clerk - 1
Account Clerk I - 2
Clerk Typist II - 2
Clerk Typist I - 2

CORPORATION COUNSEL

Corporation Counsel - 1
Assistant Corporation Counsel - 1

COUNTY BOARD CHAIRMAN

County Board Chairman - 1
Executive Secretary - 1
Clerk Stenographer II - 1 (part time)
Switchboard Operator - 1

COUNTY COURTS
- Judge - 3
- Register in Probate - 1
- Court Reporter - 3 (part time)
- Deputy Clerk - 1
- Deputy Register in Probate - 1
- Reporter and Juvenile Court Clerk - 1
- Criminal and Traffic Court Administrator - 1
- Clerk Stenographer III - 1
- Clerk Stenographer II - 1
- Clerk Stenographer I - 1
- Clerk Typist II - 7
- Clerk Typist I - 1
- Records Clerk - 1
- Clerk III - 1
- Clerk II - 2

COURTHOUSE MAINTENANCE
- Buildings and Grounds Superintendent Engineer - 1
- Assistant Buildings and Grounds Superintendent Engineer - 1
- Maintenance Man II - 6
- Maintenance Man I - 4
- Janitress - 7

DISTRICT ATTORNEY
- District Attorney - 1
- Assistant District Attorney - 3
- Clerk Stenographer III - 1
- Clerk Stenographer II - 2

FAMILY COURT COMMISSIONER
- Family Court Commissioner - 1
- Assistant Family Court Commissioner - 1

HEALTH DEPARTMENT
- Public Health Physician - 1
- Director of Environmental Sanitation - 1
- Sanitarian II - 1
- Sanitarian I - 5
- Bacteriologist - 1
- Sanitarian Aide - 1
- Laboratory Technician Aide - 1
- Vital Statistics Clerk - 1
- Clerk Typist III - 1
- Clerk Typist II - 1
- Clerk Stenographer II - 3
- Clerk Stenographer I - 1
- Director of Nurses - 1
- Supervising Nurse - 3
- Certified Public Health Nurse - 19
- Dental Hygienist - 1

HIGHWAY DEPARTMENT
- Commissioner - 1
- Assistant Commissioner - 1
- Patrol Superintendent - 1
- General Superintendent - 1
- 1st Assistant Superintendent - 1
- 2nd Assistant Superintendent - 1
- Account Clerk II - 1
- Account Clerk I - 1
- Clerk Typist II - 1
- Patrolman II - 30
- Patrolman II and Equipment Operator - 2
- Patrolman I - 35
- Equipment Operator II - 22
- Blacksmith I - 2
- Foreman I - 4
- Mechanic II - 3
- Equipment/Air Compressor Operator - 1
- Signman - 1
- Shovel Operator - 3
- Truck Driver II - 1
- Stock Clerk II - 1
- Maintenance II - 2
- Shop Clerk - 1

HOME

Nursing Service
- Unit Supervisor - 1
- Registered Nurse Supervisor III - 2
- Registered Nurse - 8 (2 part time)
- Licensed Practical Nurse - 3 (1 part time)
- Aide II - 12
- Orderly - 3
- Aide I - 54 (1 part time)

Occupational Therapy
- Registered Occupational Therapist - 1
- Certified Occupational Therapy Assistant - 1

Buildings and Grounds Maintenance
- Janitress - 3
- Janitor - 4
- Maintenance Man - 3
- Gardener - 1

HOSPITAL

Administration
- Superintendent - 1
- Assistant Superintendent - 1
- Office Manager - 1
- Secretary - 1
- Clerk Typist II - 1
- Clerk Typist I - 1
- Account Clerk I - 1
- Switchboard Operator - 3 (1 relief)

Medical
Psychiatrist - 1
Medical Doctor - 1
Registered Medical Technologist - 1 (part time)
Laboratory Assistant, Specialist Aide II - 1
Specialist Aide II - 1

Nursing Service
Registered Nurse Supervisor - 2
Registered Nurse - 4 (1 part time)
Licensed Practical Nurse - 4 (3 part time)
Aide II - 14
Orderlies - 16 (2 part time)
Aide I - 36

Personal Services
Psychiatric Social Worker III - 1
Caseworker II - 1
Clerk Stenographer III - 1
Physical Therapist - 1 (part time)
Social Worker - 1
Pharmacist - 1
Seamstress - 2
Beautician - 1
Orderly/Driver - 1

Food Service
Food Service Manager - 1
Cook II - 2
Stock Clerk - 1
Cook I - 4
Domestic Service - 15 (3 part time)

Occupational Therapy
Supervisor, Occupational Therapy - 1
Senior Occupational Therapist - 1
Certified Occupational Therapy Assistant - 2
Occupational Therapy Staff - 1

Housekeeping
Housekeeper - 1
Janitress - 4
Janitor - 2

Laundry
Laundry Supervisor - 1
Laundry Worker - 5

Maintenance and Buildings
Buildings and Grounds Maintenance Superintendent Engineer - 1
Assistant Buildings and Grounds Maintenance Superintendent Engineer - 1
Operations Engineer - 1
Maintenance Man - 3
Gardener - 1

Farm

Farm Manager - 1

MENTAL HEALTH CLINIC

Psychiatrist Director - 1
Staff Psychiatrist - 1
Chief Psychologist - 1
Chief Psychiatric Social Worker - 1
Staff Psychologist II - 1
Psychiatric Social Worker II - 2
Secretary - 1
Clerk Stenographer III - 1
Clerk Stenographer II - 1
Clerk Stenographer I - 1
Staff Psychologist I - 1
Psychiatric Social Worker I - 2

PARK DEPARTMENT

Park Maintenance I - 8
Park Maintenance II - 4
Park Maintenance III - 1
Greenskeeper - 1

PLANNING DEPARTMENT

Planning Director - 1
Planner III - 2
Planner II - 3
Planner I - 1
Secretary - 1
Clerk Stenographer III - 1
Account Clerk I - 1

REGISTER OF DEEDS

Register of Deeds - 1
Deputy Register of Deeds - 1
Clerk III - 1
Photostat Operator - 1
Clerk II - 5
Clerk Typist II - 1
Clerk Typist I - 2
Clerk I - 3

REPRODUCTION

Account Clerk I - 1
Multilith Operator - 2

SHERIFF

Sheriff - 1
Captain - 1
Lieutenants - 2
Sergeants - 8
Juvenile Administrator - 1
Administrative Assistant II - 1
Process Administrator - 1

- Detectives - 7
- Juvenile Officers - 2
- Identification Officers - 2
- Deputy - 54
- Administrative Assistant I - 1
- Assistant Process Administrator - 1
- HUBER Officer - 1
- Deputy Trainee - 9
- Matron III - 1
- Matron I - 2
- Cook - 1
- Clerk Typist II - 2
- Clerk Typist I - 1
- Automobile Mechanic - 1

SPECIAL EDUCATION-HANDICAPPED CHILDREN
- Director of Special Education - 1
- Secretary - 1
- Curriculum Coordinator - 1
- Psychologist - 1
- Speech Therapist - 19 (5 part time)

SURVEYOR - 1

TAX ASSESSMENT
- Clerk III - 1
- Addressograph Operator - 1

TREASURER
- County Treasurer - 1
- Deputy County Treasurer - 1
- Account Clerk I - 1
- Clerk Typist II - 2 (1 part time)
- Clerk Typist I - 1

WELFARE
- Director - 1
- Casework Supervisor II - 1
- Casework Supervisor I - 3
- Caseworker III - 4 (1 part time)
- Caseworker II - 5
- Caseworker I - 13
- Clerk II - 3
- Administrative Assistant - 1
- Clerk III - 1
- Stenographer III - 2
- Stenographer II - 2
- Stenographer I - 2
- Homemaker - 1

MISCELLANEOUS OFFICES
- Civil Defense Director - 1
- Coroner - 1
- Historian - 1

Humane Agent - 1
Radio Technician - 1
Veterans Service Officer - 1
Clerk Stenographer I - 2 (part time)

WAUKESHA AREA STATE EMPLOYEE ROSTER (MAJOR* STATE GOVERNMENT EMPLOYERS): 1966-'67

DISTRICT 2 STATE HIGHWAY COMMISSION

Account Examiner - 3
Administrative Assistant III - 1
Administrative Assistant I - 1
Civil Engineer V - Highways - 4
Civil Engineer IV - Highways - 13
Civil Engineer III - Highways - 32
Civil Engineer II - Highways - 9
Civil Engineer I - Highways - 1
Clerk II - 1
Draftsman II - 4
Engineering Aid V - 1
Engineering Aid IV - 8
Engineering Aid III - 31
Engineering Aid II - 16
Engineering Aid I - 1
Maintenance Craftsman Electrician - 1
Maintenance Man - 1
Right of Way Agent IV - 1
Right of Way Agent III - 1
Right of Way Agent II - 6
Right of Way Agent I - 2
Right of Way Agent Trainee - 2
Stenographer III - 1
Stenographer II - 4
Stenographer I - 1
Typist II - 1

WISCONSIN SCHOOL FOR BOYS

Administration

Account Clerk - 1
Account Examiner - 1
Administrative Assistant III - 1
Assistant Superintendent - 1
Clerk II - 1
Institutional Business Manager II - 1
Institutional Superintendent I - 1
Secretarial Stenographer - 1
Stenographer II - 1
Storekeeper II - 1
Storekeeper I - 1
Typist II - 2

Subsistence

Baker II - 1
Chef - 4
Domestic Service Helper II - 4
Food Service Manager II - 1
Meat Cutter II - 1

State - Waukesha Area

Medical
Graduate Nurse II - 4
Physician - 1

Dental
Dentist II - 1
Dental Hygienist - 1

General Supervision
Welfare Administrator II - 1
Youth Counselor IV - 7
Youth Counselor III - 11
Youth Counselor II - 54
Youth Counselor I - 28

Recreation
Teacher III - 1
Teacher II - 2

Education
Clerk II - 1
Principal IV - 1
Teacher VI - 1
Teacher V - 2
Teacher IV - 7
Teacher III - 2
Teacher II - 9
Teacher - 2
Typist II - 1
Youth Counselor II - 1

Religion
Chaplain - 2

Guidance
Clerk III - 1
Social Worker III - 1
Social Worker II - 8
Social Worker I - 1
Stenographer III - 1
Stenographer II - 8
Typist II - 2
Welfare Administrator II - 1
Welfare Administrator I - 2

Barber and Beautician
Barber - 1

Household
Building Maintenance Helper II - 2

Laundry
Laundry Supervisor II - 1
Seamstress I - 2

Power Plant
Boiler Operator II - 5
Motor Vehicle Operator I - 1
Operating Engineer I - 3
Superintendent of Buildings and Grounds I - 1

General Plant
Gardener I - 1
Youth Counselor II - 1

General Repair and Maintenance
Maintenance Craftsman - 8
Maintenance Craftsman Foreman II - 1

*See footnote for State Employees in Brown County.